# Fact Sheet

## The U.S. Environmental Protection Agency (EPA) Proposes to:

- **Issue a National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges to Waters of the United States in Idaho from Regulated Small Municipal Separate Storm Sewer Systems (MS4s);**
  **and**
- **Designate Certain Entities as Regulated Small MS4s Needing NPDES Permit Coverage under the General Permit**

Public Comment Start Date:
Public Comment Expiration Date:

Technical Contact: Misha Vakoc
206-553-6650, 800-424-4372, ext. 6650 (within AK, ID, OR and WA)
Vakoc.misha@epa.gov

EPA proposes to issue a NPDES General Permit for storm water discharges into waters of the United States in Idaho from regulated small MS4s. To ensure protection of water quality and human health, the Idaho MS4 General Permit (MS4GP) establishes conditions, prohibitions, and management practices for discharges of storm water from regulated small MS4s. Specifically, operators of regulated small MS4s must implement a comprehensive storm water management program (SWMP) to reduce the discharge of pollutants from the MS4 to the maximum extent practicable (MEP), protect water quality, and to satisfy the appropriate water quality requirements of the Clean Water Act (CWA).

EPA also proposes to designate the MS4s owned and/or operated by the City of Moscow, Idaho, and the University of Idaho in Moscow, as regulated small MS4s with discharges that need NPDES permit coverage under the Idaho MS4GP.

Permit requirements, and the proposed designation of additional MS4s named above as needing NPDES permit coverage, are based on Section 402(p) of the CWA, 33 U.S.C. § 1342(p), and EPA regulations for permitting municipal storm water discharges (40 CFR §§ 122.28, 122.30-35, and 123.35; see also 64 FR 68722 [Dec. 8, 1999] and 81 FR 89320 [Dec. 9, 2016].

This Fact Sheet includes:

- information on public comment, public hearing, and appeal procedures;
- descriptions of the regulated small MS4 discharges to be covered under the Idaho MS4GP;

- explanation of the conditions, prohibitions, and management practices for small MS4 discharges;
- explanation of the decision to designate the City of Moscow and the University of Idaho as regulated small MS4s that need permit coverage under the Idaho MS4GP; and
- technical references supporting the conditions in the MS4GP.

***EPA is requesting comments on all aspects of the proposed permit. Topics about which EPA is particularly interested in receiving public input are identified in this Fact Sheet using bold italic text.***

**State Certification**

EPA requested that the Idaho Department of Environmental Quality (IDEQ) consider certifying the Idaho MS4GP pursuant to Section 401 of the Clean Water Act, 33 U.S.C. §1341. EPA may not issue the final permit until IDEQ has granted, denied, or waived certification. The State of Idaho has provided a draft certification for the Draft Idaho MS4GP and it is attached as Appendix 1 to this document. Questions on the draft DEQ Section 401 certification may be addressed to XXXXXXXXX at (208) 373-XXX or at XXXXXX@deq.idaho.gov. Comments regarding the certification should be directed to:

**ATTN: Surface Water Program 401 Coordinator**
**Idaho Department of Environmental Quality**
**1410 N. Hilton Street**
**Boise, ID 83706**

**Public Meetings**

EPA has scheduled public meeting opportunities **in XXXX** during the comment period. For a complete schedule of these meetings, please see EPA's webpage at https://yosemite.epa.gov/r10/water.nsf/stormwater/ms4-id-wa, or contact EPA by phone as indicated at the beginning of this document. During these meetings, EPA staff will be available to discuss the draft permit and designation decisions, answer questions, and accept written comments.

**Public Comment and Opportunity for Public Hearing**

Persons wishing to comment on the draft Idaho MS4GP, and/or EPA's decision to designate MS4 discharges within the City of Moscow as regulated small MS4 discharges, must do so in writing by the ***expiration date of the public notice***.

Comments must include the commenter's name, address, and telephone number, the permit name (Idaho MS4GP), and/or the MS4 decision topic. Comments must include a concise statement of the basis for the issue, and any relevant facts the commenter believes EPA should consider in making its final decisions on the conditions and limitations in the final MS4GP, and/or regarding the entities considered for designation as regulated MS4s. EPA must receive all comments no later than the expiration date of the public comment period.

Persons wishing to request that a public hearing be held may do so, in writing, no later than **(insert *date ~30 days from start of public notice period*).** A public hearing is a formal meeting whereby EPA officials hear the public's views and concerns about an EPA action or proposal. All requests for a formal public hearing must state the nature of the issues to be raised, reference the NPDES permit name and permit number, and include the requester's name, address, and telephone number. Comments and/or requests for a public hearing must be submitted either hard copy via U.S. Postal mail, or electronically via Email, to the attention of the EPA Regional Director:

**U.S. Environmental Protection Agency, Region 10- Office of Water and Watersheds**
**Attn: Idaho MS4 General Permit**
**1200 6th Avenue, Suite 900, OWW-191**
**Seattle, WA 98101**
**E-mail:** vakoc.misha@epa.gov

After the comment period, EPA will review and address all submitted comments. EPA's Regional Director for the Office of Water and Watersheds will then make final decisions regarding permit issuance and the other decision actions described in this notice. If EPA receives no comments, the tentative conditions in the draft MS4GP, and other decisions, will become final.

Pursuant to Section 509(b)(1) of the CWA, 33 U.S.C. § 1369(b)(1), any interested person may appeal the General Permit in the Ninth Circuit Court of Appeals within 120 days following notice of EPA's final decision for the permit.

Pursuant to 40 CFR § 124.19, any interested person may appeal the EPA decisions to designate the City of Moscow and University of Idaho in Moscow as operators of regulated MS4 discharges to the Environmental Appeals Board (EAB) within 30 days following notice of EPA's final decision on these actions.

### Documents Available for Review

The draft MS4GP, and other information related to these decisions are available on the EPA Region 10 website at: http://yosemite.epa.gov/r10/water.nsf/stormwater/ms4-id-wa
The draft MS4GP permit and related materials can be reviewed in person by contacting the EPA Region 10 Operations Office in Boise or in Region 10's Regional Office in Seattle, between 8:30 a.m. and 4:00 p.m. (Mountain Time), Monday through Friday:

**United States Environmental Protection Agency,**
**Region 10 - Idaho Operations Office**
**950 W. Bannock Street, Suite 900**
**Boise, ID 83702**
**(208) 378-5746**

**U.S. Environmental Protection Agency, Region 10-**
**Office of Water and Watersheds**
**1200 Sixth Avenue, Suite 900, OWW-191**
**Seattle, Washington 98101**
**1-800-424-4372, and request x-0523**

For questions regarding the permit or fact sheet, contact Misha Vakoc at the phone number or e-mail listed above. Services for persons with disabilities are available by contacting Audrey Washington at (206) 553-0523.

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## Acronyms

| | |
|---|---|
| ACM | Alternative Control Measure |
| BE | Biological Evaluation |
| BMP | Best Management Practices |
| CFR | Code of Federal Regulations |
| cfu | Colony Forming Unit |
| CGP | Construction General Permit |
| CREAT | Climate Resilience Evaluation and Analysis Tool |
| CWA | Clean Water Act |
| CZARA | Coastal Zone Act Reauthorization Amendments |
| DMR | Discharge Monitoring Report |
| EFH | Essential Fish Habitat |
| EFNA | Edson Fichter Nature Area |
| ELG | Effluent Limitation Guideline |
| EPA | U.S. Environmental Protection Agency |
| ESA | Endangered Species Act |
| FR | Federal Register |
| $Ft^2$ | Square feet |
| HUC | Hydrologic Unit Code |
| ID | Idaho |
| IDAPA | Idaho Administrative Procedures Act |
| IDDE | Illicit Discharge Detection and Elimination |
| IDEQ | Idaho Department of Environmental Quality |
| In | Inches |
| ITD | Idaho Transportation Department |
| LA | Load Allocation |
| LBR | Lower Boise River |
| lbs/day | Pounds per Day |

| | |
|---|---|
| mg/L | Milligrams per liter |
| ml | Milliliters |
| µg/L | Micrograms per liter |
| MEP | Maximum Extent Practicable |
| MS4 | Municipal Separate Storm Sewer System |
| MS4GP | Municipal Separate Storm Sewer System General Permit |
| NEPA | National Environmental Protection Act |
| NHPA | National Historic Preservation Act |
| NOI | Notice of Intent |
| NOT | Notice of Termination |
| NOAA | National Oceanic and Atmospheric Administration |
| NPDES | National Pollutant Discharge Elimination System |
| OMB | Office of Management and Budget |
| OWW | Office of Water and Watersheds |
| O&M | Operations and maintenance |
| Pg/L | Picograms per Liter |
| PCBs | Polychlorinated Biphenyls |
| POTW | Publicly owned treatment works |
| QAPP | Quality assurance project plan |
| SCM | Storm Water Control Measures |
| SF | South Fork |
| SHPO | State Historic Preservation Office |
| SPCC | Spill Prevention and Control and Countermeasure |
| SS | Suspended Solids |
| SWMP | Storm Water Management Program |
| SWPPP | Stormwater Pollution Prevention Plan |
| TP | Total Phosphorus |
| TKN | Total Kjeldahl Nitrogen |
| TMDL | Total Maximum Daily Load |
| TSS | Total suspended solids |
| UA | Urbanized Area |
| USC | United States Code |
| USFWS | U.S. Fish and Wildlife Service |

| | |
|---|---|
| WA | Washington State |
| WAC | Washington Administrative Code |
| WLA | Waste load allocation |
| WQ | Water Quality |
| WQS | Water Quality Standards |

# I. Introduction

This fact sheet explains the rationale for the permit conditions in the Idaho Small Municipal Separate Storm Sewer System (MS4) General Permit (hereafter, the MS4GP or GP).

## A. Statutory and Regulatory Overview

Storm water is the surface runoff that results from rain and snow melt. Urban development alters the landscape's natural infiltration, and human activity generates pollutants that can accumulate on paved or impervious surfaces. Uncontrolled pollutants and flow associated with storm water discharges from urban areas can negatively affect water quality. Contaminants enter storm water from a variety of sources in the urban landscape. Urban storm water is often a contributing factor where there is a water quality standard (WQS) impairment in a particular water body. Storm water or urban runoff typically contains a mixture of pollutants, including the following major constituents:

- Sediment;
- Nutrients (nitrogen and phosphorus);
- Chlorides;
- Trace metals;
- Petroleum hydrocarbons;
- Microbial pollution; and,
- Organic chemicals (pesticides, herbicides, and industrial).[1]

An increase in impervious surface cover will increase the amount of runoff. Substantial effects of runoff generally take one of two forms. The first is caused by an increase in the type and quantity of pollutants in storm water runoff. These pollutants can become suspended in runoff and are carried to receiving waters, such as lakes, ponds, and streams, and can impair the aquatic life uses of these waters (see Section 4.4.3 for more information). The second kind of runoff effect occurs by increasing the quantity of water delivered to the water body as a result of storms. Increased impervious surface area (for example, parking lots, driveways, and rooftops) interrupts the natural process of gradual percolation of water through vegetation and soil, and the water that would percolate under natural conditions may instead be discharged through an MS4. The effects of this alteration include streambank scouring and downstream flooding, which can affect aquatic life and damage property. [2]

The federal Clean Water Act (CWA) Section 402(p), 33 U.S.C. § 1342(p) and the National Pollutant Discharge Elimination System (NPDES) storm water regulations establish the permit

[1] Shaver, Horner, et al. 2007; EPA 1990; and EPA 1999.

[2] USGS and EPA, 2015.

requirements for regulated MS4 discharges. Section 402(p)(3)(B) of the CWA, 33 U.S.C. §1342(p)(3)(B) requires any NPDES permit for MS4 discharges to effectively prohibit non-precipitation related flows from entering the MS4, and require controls to reduce the discharge of pollutants to the maximum extent practicable (MEP), including management practices, control techniques, and system design and engineering methods, and such other provisions determined to be appropriate by the NPDES permitting authority.

Definitions of relevant terms, such as "*municipal separate storm sewer*," "*large MS4*," "*medium MS4*," and "*small MS4*," are found at 40 CFR §122.26(b). In general, a *municipal separate storm sewer* includes any publicly -owned conveyance or system of conveyances that discharges to waters of the United States, is designed or used for collecting and conveying storm water, is not a combined sewer, and is not part of a publicly owned treatment works. A *municipal separate storm sewer system*, or MS4, includes roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man- made channels, and/or storm drains.[3]

In 1990, EPA developed the first phase of federal storm water regulations as directed by the CWA. The "Phase I" regulations established NPDES permit application and related requirements for discharges from large MS4s and medium MS4s. The Phase I regulation identified the large- and medium MS4s nationally based on the 1990 Census population. Based on the 1990 Census in Idaho, the Phase I storm water regulations automatically designated MS4 operators discharging within the boundaries of Garden City and Boise as medium MS4s.[4]

In 1999, EPA developed the "Phase II" storm water regulations, and designated additional small MS4s as needing NPDES permits. Regulated small MS4s include any MS4 discharge not already covered by Phase I that is located (partially or wholly) within an Urbanized Area (UA) as defined by the latest decennial Census. Regulated small MS4s in Idaho are located in Census-defined UAs of Coeur d'Alene; Lewiston; Nampa; Boise; Pocatello; and Idaho Falls. The Phase II regulation also defines regulated small MS4s as those systems with a UA that serve military bases or other properties owned by the United States; colleges and universities; large hospital or prison complexes; and highway systems.[5]

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[3] *See*: 40 CFR §122.26(b); 122.34(a); and EPA 1990.

[4] In December 2000, EPA issued a single individual NPDES permit (#IDS027561) for the Phase I MS4 discharges owned/operated by six co-permittees operating in Garden City and Boise, ID; EPA reissued Permit #IDS027561 effective January 2013; this permit expires in January 2018.

[5] *See*: 40 CFR §§ 122.26(b)(16) and 122.30 through 37; and EPA 1999. U.S. Census maps for the Coeur d'Alene, Lewiston (ID)-Clarkston (WA), Nampa, Boise, Pocatello, and Idaho Falls UAs are available at http://www2.census.gov/geo/maps/dc10map/UAUC_RefMap/ua/. Individual area web links are listed in Appendix 2 of this document.

The Phase II regulation includes authority for EPA (or states that administer the NPDES program as the permitting authority) to require NPDES permits for other unregulated storm water discharges by a designation process.[6] A more detailed discussion of the designation process is set forth in Sections I.E. and IV.C. below.[7]

Permits for small MS4 discharges must include terms and conditions to reduce the discharge of pollutants from the MS4 to the MEP, to protect water quality, and to satisfy the appropriate water quality requirements of the Clean Water Act.[8] The MS4 permittee must control pollutants in their MS4 discharges to the MEP by addressing the six "minimum control measures," i.e., public education and outreach, public participation and involvement, illicit discharge detection and elimination, construction site runoff control, post construction runoff control, and pollution prevention and good housekeeping. A regulated small MS4 operator may seek NPDES permit coverage under an available general permit, or the operator may apply for an individual permit.[9]

In 2016, EPA revised the Phase II regulations to provide opportunity for public notice and comment and permitting authority review and approval of requirements applicable to MS4s to meet the MS4 permit standard. The MS4 permit standard is the requirement "to reduce the discharge of pollutants from the MS4 to the maximum extent practicable, to protect water quality, and to satisfy the water quality requirements of the Clean Water Act. These revisions are referred to as the *Small MS4 General Permit Remand Rule*, or the "Remand Rule." [10] The rule revisions outline procedures for how the NPDES permitting authority must establish the required permit conditions in a small MS4 general permit, and how small MS4s obtain coverage under an available general permit. In addition, the rule revisions clarify that the permit

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[6] *See:* 40 CFR § 122.26(a)(9)(i)(C) and (D).

[7] See: 40 CFR §§ 122.32(a)(2) and 123.35(b).

[8] *See*: CWA Section 402(p)(3); 40 CFR §§ 122.34(a); EPA 2016a and 2016b. EPA now refers to this phrase as the *MS4 permit standard*.

[9] *See:* 40 CFR § 122.34(b) and additional discussion in Section III of this Fact Sheet.

[10] *See*: EPA 2016b. Various groups challenged EPA's 1999 Phase II storm water rule in federal courts, resulting in the rule's partial remand back to EPA in *Environmental Defense Center v. U.S. Environmental Protection Agency*, 344 F.3d. 832 (9th Cir. 2003). Specifically, the U.S. Court of Appeals for the Ninth Circuit remanded the Phase II rule's provisions for small MS4 NPDES general permits because they lacked procedures for permitting authority review and public notice, and for the opportunity to request a hearing on NOIs submitted under general MS4 permits. EPA's 2016 *MS4 General Permit Remand Rule* resolves these issues.

requirements established by the permitting authority must be expressed in clear, specific, and measurable terms. The rule revisions also require permitting authorities to determine necessary requirements to meet the MS4 permit standard with each new permit based on factors such as receiving water quality, compliance history, technological developments in storm water control measures, and other relevant factors. The ultimate goal is to make incremental improvements until compliance with Idaho water quality standards are attained.

As the NPDES permitting authority in Idaho, EPA Region 10 includes terms and conditions in the Idaho MS4GP that are fully consistent with the federal Phase II storm water regulatory requirements, including the recent Remand Rule revisions. In some cases, this may mean that permit conditions are expressed in more specific terms than in previous MS4 permits issued by EPA Region 10. These modifications are necessary to comply with the Remand Rule's requirement to use terms and conditions that are clear, specific, and measurable. At the same time, the permit has been structured so that MS4s can propose alternative means to achieve the same level of protection for water quality, that will then be considered in a second step of the permit issuance process. The second step, which is explained in more detail below, entails permitting authority review and approval, and public participation, that the Ninth Circuit found to be required by the CWA but lacking in the 1999 Phase II regulations, and which are included in the Remand Rule's requirements for "Two-Step General Permits" in 40 CFR 122.28(d)(2).

## B. Use of a General Permit vs. Individual NPDES Permits

Federal regulations at 40 CFR §§ 122.28 and 122.33(b) allow EPA to issue a general permit to regulate discharges from numerous facilities (such as regulated small MS4s) under one NPDES permit when those facilities:

- Are located within the same geographic area;
- Involve the same or substantially similar types of operations;
- Discharge the same types of wastes;
- Require the same effluent limits or operating conditions;
- Require the same or similar monitoring requirements; and
- In EPA's opinion, the discharges can be controlled under a general permit than under separate individual permits.

Regulated small MS4s in Idaho represent substantially similar public drainage facilities that discharge storm water runoff from densely populated urban areas. All regulated small MS4s subject to the MS4GP are required to implement the same or similar narrative effluent limits and requirements.[11] For administrative efficiency and consistency, EPA has determined that a

[11] For additional discussion of effluent limitations for MS4 permits, see page 89337 of EPA 2016b.

general permit is an appropriate mechanism to address the discharges from identified regulated small MS4s in Idaho.

Where a general permit must be issued to control small MS4 discharges, the NPDES permitting authority must select between two alternative permitting approaches as outlined in 40 CFR 122.28(d) (referred to as either the "Comprehensive General Permit" or the "Two-Step General Permit"), then include the minimum requirements and procedures associated with the selected approach.

In the Idaho MS4GP, EPA is using the Two-Step General Permit approach described in 40 CFR § 122.28(d)(2). Specifically, EPA has identified storm water management control requirements to reduce pollutants to the MEP that apply to all regulated small MS4 discharges upon issuance of the MS4GP. For a subset of the GP requirements, EPA will allow a small MS4 permittee, at their discretion, to submit a request for one or more Alternative Control Measure(s) (ACM) that it deems to be equivalent to the specific MS4GP provision. For certain other requirements related to water quality protection, EPA requires the Affected MS4 Permittee to submit an ACM request to identify that Permittee's specific actions to address the pollutants of concern. Such ACMs must contain supplemental or individualized plans or information, and are to be submitted as an Amended Notice of Intent (NOI) for coverage.

Pursuant to 40 CFR § 122.28(d)(2), EPA will review the Permittee's ACM request to determine whether the ACM is acceptable and meets the MS4 standard as established in the GP. As necessary, EPA will subsequently propose unique MS4 Permittee-specific requirements for public comment and hearing, as requested. After the comment period and after considering any comments received, EPA will decide whether to establish additional enforceable requirements that apply to the ACM requester. EPA will also use the Two-Step General Permit approach to propose for comment specific permit requirements for any new MS4 that may submit a NOI after the permit effective date. See subsequent discussion of MS4GP Part 2.9, Part 4, and Appendix F, in Section III.D.4 of this Fact Sheet.

## C. Permit History

In 2006, EPA Region 10 began issuing individual NPDES permits to all regulated small MS4s in Idaho. EPA issued such permits by UA, and as a result, all existing regulated small MS4s in Idaho (except those in the Lewiston UA) are authorized to discharge pursuant to individual NPDES permits. As of October 2014, all of these individual MS4 permits are expired.[12] Each existing MS4 Permittee submitted complete permit renewal application(s) prior to their respective permit's expiration date, and, thus, their individual permit is administratively extended, pursuant to 40 CFR § 122.6.

[12] Expired Phase II MS4 permits are available for review at *http://yosemite.epa.gov/r10/water.nsf/NPDES+Permits/Current+ID1319*

In 2008, EPA proposed, but did not finalize, permits for regulated small MS4 discharges within the Lewiston UA, namely for the City of Lewiston, and the Idaho Transportation Department (ITD) District #2. EPA has subsequently received updated MS4 permit applications from the City of Lewiston and Lewis-Clark State College for discharges from the MS4s in the Lewiston UA.

Since 2006, EPA also received additional small MS4 permit applications from other entities that recognize their need to obtain small MS4 permit coverage. See further discussion in Section I.E below.

As stated above, upon EPA's issuance of the Idaho MS4GP, EPA intends to authorize MS4 permit coverage to all eligible regulated small MS4s that have submitted complete and appropriate NPDES permit applications and/or permit renewal applications. After permit issuance, EPA intends to propose for public comment any authorization decisions based on any Notices of Intent submitted after the permit effective date.

## D. Permit Development

Instead of reissuing individual permits for regulated small MS4s, EPA developed the permit terms and conditions in the MS4GP to address the MS4 control measure requirements specified in 40 CFR §122.34.

40 CFR§ 122.34(a) requires that the NPDES permitting authority include terms and conditions in each successive permit that meet all of the requirements of 40 CFR § 122.34 "*based on its evaluation of the current permit requirements, record of permittee compliance and program implementation progress, current water quality conditions, and other relevant information.*" MS4 permittees should make iterative progress towards meeting water quality objectives from one MS4 permit term to the next permit term. As the NPDES permitting authority, EPA must consider adjustments in the form of modified permit requirements, where necessary, to reflect current water quality conditions, BMP effectiveness, and other current relevant information. EPA cannot reissue the same permit conditions for subsequent five year permit terms without considering whether more progress can or should be made in meeting water quality objectives, especially in areas where the receiving waters are not attaining the applicable water quality standards."[13]

The Idaho MS4GP combines into a single document the narrative requirements applicable to all small MS4 permittees to address the minimum measures required by 40 CFR § 122.34(a) and (b). Where needed based on the receiving water body, the MS4GP also includes water quality

[13] See: EPA 2016b, pages 89337-89338.

based requirements for individual MS4 operators, as required by 40 CFR §§122.34(c) and 122.44(d)(1). Finally, the MS4GP also includes evaluation and assessment requirements, as required by 40 CFR §122.34(d).

EPA considered a variety of information in order to develop the MS4GP provisions, including but not limited to:

- Terms and conditions required in the prior small MS4 individual permits;
- Applicable total maximum daily loads (TMDLs) analyses, and impaired waters listings by IDEQ for the relevant Idaho receiving waters;
- Annual Reports submitted by existing MS4 permittees during the prior permit terms;
- Updated UA maps and boundaries, based on the Year 2010 Census;
- Input from stakeholders based on their review of preliminary draft permit documents;
- National MS4 permit-related summary information as compiled by EPA, including:
    - *Compendium Part 1: Six Minimum Control Measure Provisions,* November 2016*;*
    - *Compendium Part 2: Post Construction Performance Standards,* November 2016*;*
    - *Compendium Part 3: Water Quality-Based Requirements,* April 2017*;*
    - *Summary of State Post Construction Stormwater Standards,* July 2016;
    - EPA's November 2014 Memo entitled *Revisions to the November 22, 2002 Memorandum "Establishing Total Maximum Daily Load (TMDL) Waste load Allocations (WLAs) for Storm Water Sources and NPDES Permit Requirements Based on Those WLAs;*" and the
    - *MS4 Permit Improvement Guide,* April 2010. [14]

- Permit application materials submitted by each entity listed in Appendix 3 of this Fact Sheet and MS4GP Appendix A.1, including information about existing SWMP implementation from Annual Reports submitted by these existing MS4 Permittees;

- Conclusions and recommendations from the National Research Council Report entitled *Urban Storm Water Management in the United State*s, October 2008;

- Technical developments in the field of storm water management, including recent research and information on the effective and feasible methods for the on-site management and treatment of storm water using practices commonly referred to as "low impact development" (LID), "green infrastructure" (GI) and/or "green storm water infrastructure" (GSI) techniques.

[14] These documents are available on EPA's website at https://www.epa.gov/npdes/municipal-sources-resources

- Other MS4 permits issued by EPA for regulated small MS4s in Idaho, Washington, Puerto Rico, Massachusetts, and New Mexico, as well as MS4 permits issued by other state NPDES permitting authorities.[15]

## E. Types of Regulated Small MS4s Covered by the Idaho MS4GP

In Idaho, various public entities own and/or operate regulated small MS4s within UAs, including, but not limited to: cities and counties; local highway districts; ITD; and state or community colleges and universities.

"Regulated small MS4s" may also include the storm water conveyance or system of conveyances owned or operated by any other public entity that EPA designates as needing a NPDES permit. Such a designation may be based on an EPA finding that discharges from the MS4 contribute to a violation of a water quality standard, is a significant contributor of pollutants to waters of the United States, and/or substantially contributes to the pollutant loadings of a physically interconnected (and otherwise regulated) small MS4.[16]

EPA intends to provide permit coverage under the MS4GP to both *Existing MS4 Permittees*, and *New MS4 Permittees*. After permit issuance, any new MS4 that meets the definition of a "regulated small MS4" must obtain coverage under the MS4GP by submitting a Notice of Intent for permit coverage pursuant to procedures described later in this Fact Sheet.

- "*Existing MS4 Permittees*" are listed in Appendix A.1 of the MS4GP and Appendix 3 of this Fact Sheet. An Existing MS4 Permittee previously had individual NPDES permit coverage, and has submitted a NPDES permit renewal application.
- "*New MS4 Permittees*" are listed in Appendix A.2 of the MS4GP and Appendix 3 herein. New MS4 Permittees include regulated entities that previously submitted MS4 permit applications to EPA, but EPA has not yet provided final NPDES permit coverage. As of the date of this Fact Sheet, new MS4 Permittees listed in MS4GP Appendix A.2 are located in the Lewiston, Coeur d'Alene and Pocatello UAs.
    - After the effective date of the MS4GP, when EPA receives a NOI from another eligible MS4 entity, EPA will use the Two-Step General Permit procedure to propose authorizing a new MS4 Permittee by listing in MS4GP Appendix A.2 and, as needed, by including any MS4-specific permit requirements in MS4GP Appendix F or H.

In contrast, public entities listed in Table 1 below previously communicated to EPA that they do not own or operate a regulated small MS4. Despite their physical locations within the Census-

[15] See EPA's complete Administrative Record Index for the permit described in this Fact Sheet.
[16] See: 40 CFR §§ 122.26(a)(9)(i); 122.32(a) and 123.35(b)(4).

defined UAs listed therein, these entities either do not own or operate a MS4, or their drainage infrastructure does not discharge to waters of the United States.

**Table 1*: Entities That Do Not Own or Operate a Regulated Small MS4*[17]**

| Urbanized Area | Municipal Entity |
|---|---|
| Coeur d'Alene UA | City of Heutter; City of Hayden; City of Fernan Lake Village; City of Dalton Gardens; City of Hayden Lake; Kootenai County |
| Boise UA | City of Meridian, City of Eagle |
| Idaho Falls UA | City of Iona, Bonneville County, Idaho National Laboratory |

***EPA requests public comment on whether other municipal entities in the Urbanized Areas in Idaho own or operate regulated MS4s subject to the federal storm water permitting requirements.***

## F. Geographic Area of Coverage

In the prior individual permits for Existing MS4 Permittees, EPA defined the Permit Area as only the "*portion of the MS4 that is located within a UA as determined by the latest Decennial Census*," consistent with the Phase II regulations at 40 CFR §122.32(a)(1). EPA continues to define the area of permit coverage in this manner for regulated small MS4s owned and/or operated by counties, highway districts, ITD, colleges and universities, or other special districts.

For Idaho cities that own and/or operate a regulated small MS4, EPA defines the geographic area of permit coverage under the MS4GP as the *incorporated City area served by the MS4*. Section 402(p)(3)(B)(i) of the CWA provides that permits for municipal discharges from municipal storm sewers may be issued on a system-wide or jurisdiction-wide basis.

EPA intends for regulated small MS4 cities to apply their storm water management actions citywide in areas served by the MS4 to appropriately control the discharge of pollutants from their MS4s to the MEP.[18] EPA reviewed current city ordinances in the regulated small MS4 cities, and finds that most regulated small MS4 cities in Idaho already impose their SWMP-related ordinances on a citywide basis in areas served by their MS4. Pollutants in regulated small MS4 discharges from cities contribute to elevated levels of pollutants (such as sediment, nutrients, and bacteria) into adjacent receiving waters. To protect water quality in a comprehensive manner, all regulated small MS4 cities should impose their storm water

[17] Relevant information provided to EPA by these entities is available in the Administrative Record for this GP.

[18] See: EPA 1999, pages 68750-68751.

management controls across their jurisdiction in areas draining into their MS4. Preventative storm water management controls, comprehensively imposed in areas served by the MS4, are necessary, appropriate, and consistent with applicable regulatory requirements in 40 CFR §§122.26(a)(1)(v), 122.26(a)(9)(C), 122.26(a)(9)(D), and 122.34(c).

EPA clarifies that county areas located outside of Census-defined Urbanized Areas in Idaho are largely rural and do not have significant amounts of impervious surfaces associated with urban development. As a result, at this time EPA is not expanding the area of permit coverage for counties beyond the Urbanized Area boundary.

Where any regulated small MS4 operator/Permittee must expand the scope of its existing storm water management controls to encompass all areas of the jurisdiction served by the MS4 with the mandatory geographic areas, the operator/Permittee must do so no later than 180 days prior to the expiration date of the MS4GP.

## II. Applicable Water Quality Standards & Receiving Waters

### A. Overview

EPA intends to authorize municipal storm water discharges to waters of the United States from regulated small MS4s owned and/or operated by the entities listed in Appendix 3 of this Fact Sheet. Relevant receiving waters, by Urbanized Area or City, and the applicable Idaho water quality standards, are listed in Appendix 4 of this Fact Sheet. The water quality impairment and TMDL status for each receiving water is provided in Appendix 5 of this Fact Sheet.

Section 301(b)(1)(C) of the CWA and regulations at 40 CFR § 122.44 require the NPDES permitting authority to develop limitations in permits necessary to meet water quality standards. A State's water quality standards are composed of use classifications, numeric and/or narrative water quality criteria, and an anti-degradation policy. The use classification system designates the beneficial uses for each water body, such as drinking water supply, contact recreation, and aquatic life. The numeric and narrative water quality criteria are the amount of any pollutant deemed necessary by the State to support the beneficial use classification of each water body. The anti-degradation policy represents a three-tiered approach to maintain and protect various levels of water quality and uses.

40 CFR §122.44(d) specifically requires that NPDES permits include conditions necessary to ensure compliance with the water quality requirements of all affected States. For the MS4GP, Washington is an affected State because the MS4GP authorizes discharges into shared waters between Idaho and Washington.

### B. Designated Beneficial Uses

The specific use classifications for receiving waters to which the regulated MS4s discharge are

listed in Appendix 4 of this Fact Sheet. In addition, the Idaho Water Quality Standards state that all waters in the State of Idaho are to be protected for industrial and agricultural water supply, wildlife habitats, and aesthetics.[19]

Permit conditions must also meet the applicable water quality requirements of affected States other than the State in which the discharge originates, which may include downstream States. Therefore, in addition to meeting Idaho water quality requirements, discharges from regulated small MS4s in the Coeur d'Alene and Lewiston UAs, and designated small MS4 discharges within the boundaries of the City of Moscow, must meet the State of Washington water quality standards. Regulated small MS4s in these three geographic areas discharge to receiving waters immediately upstream from the Idaho/Washington state border; therefore, Appendix 4 of this Fact Sheet also lists the applicable water quality standards for Washington.[20]

## C. Anti-degradation

IDEQ will complete an anti-degradation review as part of its CWA Section 401 certification for the Idaho MS4GP; see Appendix 1 of this Fact Sheet. Upon receipt of the final CWA Section 401 certification, EPA will review the anti-degradation analysis to ensure it is consistent with the State's 401 certification requirements and the State's anti-degradation implementation procedures.

## D. Water Quality Limited Waters and Total Maximum Daily Loads

Any water body that does not, and/or is not, expected to meet the applicable State water quality standards is described as "impaired" or as a "water quality-limited segment." Section 303(d) of the CWA requires States to identify impaired water bodies within the State and develop TMDL management plans for those impaired water bodies. TMDLs define both waste load allocations (WLAs) for point sources and load allocations (LAs) for non-point sources that specify how much of a particular pollutant can be discharged from both regulated and unregulated sources, respectively, such that the water body will again meet State water quality standards. IDEQ's 2014 *Integrated Section 303(d)/Section 305(b) Report* (2014 Integrated Report) contains the list of impaired water bodies in Idaho required by CWA Section 303(d).[21]

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[19] See IDAPA 58.01.02.100.03.b and c, 100.04 and 100.05

[20] See 40 CFR §§122.4(d), and 122.44(d)(4), see also CWA Section 401(a)(2)

[21] The IDEQ's 2014 Integrated Report is available online at: https://www.deq.idaho.gov/water-quality/surface-water/monitoring-assessment/integrated-report.aspx; All applicable Idaho TMDL documents are available on IDEQ's website at http://deq.idaho.gov/water-quality/surface-water/tmdls/table-of-sbas-tmdls/

Appendix 5 of this Fact Sheet lists receiving waters for regulated small MS4 discharges to be covered by the MS4GP; indicates the waterbody assessment units, or segments, that IDEQ considers impaired; and contains the status of any applicable TMDL(s) for those segments.

NPDES permit terms and conditions for regulated storm water discharges must be consistent with the assumptions and requirements of available WLAs in TMDLs.[22] In general, EPA's guidance recommends that the NPDES permitting authority use best management practices (BMPs) to implement applicable WLAs and load reduction targets in a MS4 permit. When using BMPs as narrative permit limitations to implement a WLA or load reduction target, the NPDES permit must include a monitoring mechanism to assess compliance. The NPDES permitting authority may require the use of expanded or better-tailored BMPs in successive permit terms when prior monitoring demonstrates such controls are necessary to implement the WLA and protect water quality.[23]

EPA specifies control measures in the MS4GP Part 3 to reduce pollutants from the MS4 to the MEP. To protect water quality and address watershed specific impairments, additional pollutant reduction and assessment activities must be conducted as directed by MS4GP Part 4 and Appendix F. Sections III.F and V of this Fact Sheet contains the further rationale for additional water quality based requirements. Appendix 6 and Appendix 7 of this Fact Sheet provides the detailed rationale for additional permit terms and conditions for specific Permittees by receiving waterbody, and impairment or TMDL status, respectively.

In the event that EPA approves other TMDLs for receiving waters prior to the final issuance of the MS4GP, and the TMDL(s) contain WLA (s) for one or more regulated small MS4s, EPA may incorporate additional provisions for one or more of the regulated MS4 permittees into the final permit. If EPA approves other TMDLs for receiving waters after the MS4GP effective date (but prior to the expiration date of the MS4GP), and WLAs are included for one or more of the regulated MS4 Permittees covered by the MS4GP, EPA may elect to address the need for additional actions by requesting additional information in the form of an Amended NOI from the MS4 Permittee(s). Upon submittal of additional information detailing appropriate and necessary actions for storm water management, EPA will consider whether additional permit terms and conditions applicable to the MS4 permittee(s) are necessary. In such cases, EPA may then use the Two-Step General Permit procedure outlined in 40 CFR §122.28(d) to establish the additional requirements as enforceable permit terms and condition when they apply to a specific MS4 or modify the MS4GP and incorporate any appropriate requirements into the permit when the additional requirements apply to all covered MS4s. MS4GP Part 7.1 addresses

[22] See: 40 C.F.R. §§ 122.34(c)(1) and 122.44(d)(1)(vii)(B).

[23] See: EPA 1996; EPA 2002; EPA 2014a; EPA 2014b; and EPA 2016b.

such a permit modification, consistent with the NPDES regulations at 40 CFR §§122.28(d), 122.62, 122.64 and 124.5.

## III. Basis for Permit Conditions

### A. Maximum Extent Practicable

NPDES permits for regulated small MS4s must include terms and conditions to reduce the discharge of pollutants from the MS4 to the MEP, to protect water quality, and to satisfy the appropriate water quality requirements under the CWA. At a minimum, MS4 permit terms and conditions must satisfy the requirements set forth in the federal regulations at 40 CFR § 122.34(a) through (e).[24]

*MEP* is the statutory standard that describes the level of pollutant reduction that small MS4 operators must achieve, and what constitutes MEP must continually adapt to current conditions and understanding of BMP effectiveness. Neither the CWA nor the storm water regulations provide a specific definition of MEP. The lack of a detailed definition allows for flexibility in MS4 permitting.

The iterative process of imposing the MEP standard over successive permit terms consists of the NPDES permitting authority defining clear, specific, and measurable NPDES permit requirements; MS4 Permittees implementing the required actions as part of a comprehensive program; and the MS4 permittee and NPDES permitting authority evaluating the effectiveness of BMPs used to date. This iterative permitting process continues, permit term to permit term, until water quality standards are attained.[25] [26]

EPA has defined the required storm water management control measures, and evaluation and assessment requirements, that regulated small MS4 operators in Idaho must implement in order to comply with the MS4 permit standard. To reduce the discharge of pollutants from the MS4 to the maximum extent practicable. the Permittee must develop, implement, and enforce the control measures outlined in MS4GP Part 3 (*Storm Water Management Program Control Measures*). To protect water quality, the Permittee must implement applicable requirements of MS4GP Part 4 (*Special Conditions*) and MS4GP Appendix F (*Requirements for Discharges to Impaired Waters*).

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[24] See EPA 2016b.

[25] See EPA 1999, at page 68754.

[26] See also EPA 2010 for EPA's discussion of MEP.

## B. Effluent Limitations

The terms and conditions of a MS4 permit are effluent limitations, and may consist of narrative, numeric, and/or other types of requirements. Examples include: implementation of specific tasks or practices; BMP design requirements; performance requirements; adaptive management requirements; schedules for implementation and maintenance; and frequency of actions.

The MS4GP requires all MS4 Permittees to control pollutants in their MS4 discharges through the development and implementation of a suite of BMPs. Implementation of these BMPs, as part of a Storm Water Management Program, is the primary mechanism to achieve the required pollutant reductions.

In its broadest sense, a *BMP* means any type of structural or non-structural practice or activity undertaken by the MS4 Permittee in the course of implementing its SWMP.[27]

The MS4GP describes BMPs and other requirements in more detail that were previously required in the existing administratively continued MS4 permits in Idaho in order to establish permit terms and conditions that are "clear, specific, and measurable," consistent with the recent *Small MS4 General Permit Remand Rule*.

Where the MS4 discharges into waters that currently meet Idaho water quality standards, the MS4 Permittee must fully comply with the MS4GP requirements in Parts 1-3 and 6-8 in order to meet the MS4 permit standard for Idaho.

A Permittee's implementation of the control measures described in MS4GP Part 3 constitutes progress towards reducing or eliminating the pollutants in MS4 discharges contributing to water quality standards exceedances.

However, the control measures in Part 3 alone may be insufficient to fully eliminate the individual MS4 operator's contribution to the specific water quality impairment. Therefore, it is necessary for the MS4 Permittee to focus explicit attention to the assessment and overall reduction of the specific impairment pollutant(s).

As a result, in the MS4GP, where the MS4 discharges into waters that are impaired and do not meet applicable Idaho water quality standards, or where the MS4 discharges into waters that are listed as impaired in the downstream State, the MS4 Permittee must meet the MS4 permit standard for Idaho by complying with all MS4GP requirements, including applicable water quality based requirements as directed by MS4GP Part 4 and MS4GP Appendix F. Appendix 5 of

[27] See 40 CFR § 122.34(a), 40 CFR § 122.44(k), and EPA 2016b, especially discussion of BMP on page 89337.

this Fact Sheet identifies the impairment status for waterbodies in Idaho (including waters shared with Washington) where regulated small MS4s currently discharge.

## C. Discussion of the MS4GP's Applicability and Notification Requirements

### *1. Facilities Eligible for Coverage (MS4GP Part 1.1)*

The MS4GP authorizes storm water discharges from regulated small MS4s located in a Census defined UA (unless the NPDES permitting authority grants a waiver) and/or MS4s designated as needing a permit by EPA pursuant to 40 CFR §122.32(a) or §122.26(f).[28]

Regulated small MS4s may be located entirely or partially within a Census-defined UA.[29] In Idaho, the Year 2010 Census did not delineate any new UAs; however, existing UA boundaries were expanded for the Coeur d'Alene, Lewiston, Nampa, Boise, Pocatello, and Idaho Falls UAs.

Based on differences in the way the Census Bureau calculates the boundaries for Urbanized Areas over time, some areas that were part of the 2000 Urbanized Area are not included in the 2010 Urbanized Area. However, any operator of a small MS4 discharge designated into the NPDES program based on an urbanized area calculation for any given Census year remains a regulated small MS4, unless the regulated small MS4 operator requests and EPA grants a waiver pursuant to 40 CFR §122.32.[30]

### *2. Geographic Area of Permit Coverage (MS4GP Part 1.2)*

For reasons discussed in Section I.F of this Fact Sheet, EPA proposes to define the minimum geographic Permit Area for regulated small MS4s owned and/or operated by cities as *the incorporated City area served by the MS4*. For MS4s operated by counties, highway districts, ITD, colleges and universities, or other special districts, EPA defines the geographic Permit Area to include *the area under the entity's jurisdictional control that is served by the MS4 and is within an Urbanized Area in Idaho.*

### *3. Eligibility Requirements (MS4GP Part 1.3)*

NPDES general permits may exclude specific sources from coverage. Only regulated small MS4 operators that submit a complete application, in the form of a Notice of Intent (NOI) for

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[28] See further discussion of waivers and designations in Section IV of this Fact Sheet.

[29] On March 26, 2012, the Census Bureau published the final listing of UAs for the Year 2010 Census. The Census Bureau's updated manner of determining an Urbanized Area for the Year 2010 Census is explained in 76 Federal Register (FR) 53030, August 24, 2011, at http://www.census.gov/geo/reference/pdfs/fedreg/fedregv76n164.pdf

[30] See: EPA 1999, at pages 68751- 68752. Online links to maps of the Year 2000 UAs and Year 2010 UAs in Idaho are available in Appendix 2 of this document. See also the discussion of waivers in Section IV of this Fact Sheet.

coverage, are eligible to be authorized under the MS4GP. To ensure that EPA complies with 40 CFR §122.49. MS4GP Part 1.3.2 requires new MS4 applicants to provide EPA with additional requested information to document their discharge eligibility status related to compliance with Endangered Species Act, Essential Fish Habitat requirements, and the National Historic Properties Act.[31] Additional information regarding this process is provided in MS4GP Appendices C and D.

EPA has evaluated the permit renewal applications received from all Existing MS4 permittees (and has completed additional analyses, available in the Administrative Record), and finds that all entities in MS4GP Appendix A.1 are eligible for coverage under the MS4GP. EPA continues to analyze the MS4 discharge eligibility status related to compliance with ESA and EFH requirements for the operators listed in MS4GP Appendix A.2. Assuming the required analysis is completed at the time of permit issuance, EPA intends to authorize discharges from the MS4s listed in MS4GP Appendix A.2.

### *4. Notice of Intent Requirements (MS4GP Parts 1.4)*

MS4GP Part 1.4 specifies that regulated small MS4 operators seeking authorization to discharge under the MS4GP must submit a NOI, and defines both the content and deadlines for such a submittal. As set forth in MSGP Part 1.3.1, the MS4 operators listed in Appendix A are not required to submit a NOI to obtain coverage because these operators have already submitted a NPDES permit application. Therefore, pursuant to 40 CFR §§ 122.28(b)(2)(iv) and (d)(2)(ii), EPA is notifying the MS4 operators set forth in Appendix A that EPA has reviewed their permit applications, and intends to cover them under the MS4GP immediately following the effective date of the GP (unless the operator elects to submit Amended NOI information for consideration and/or other relevant information is submitted during the public comment period announced in this Fact Sheet.)[32]

MS4GP Appendix B identifies the information required in any NOI submitted after the effective date of the MS4GP. Applicants may use the optional format provided in MS4GP Appendix B, or they may submit the required information in another format such as a letter, report, or table, with all necessary attachments. MS4GP 1.4.3 specifies where to submit NOIs. When EPA's online system allows for electronic submittal of an NOI or other report, EPA will notify all Permittees that such a system is available and the Permittee may use such electronic means of submitting the required information.

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[31] 40 CFR §§122.28(a)(4)(ii) and 122.49. See also further discussion in Section V of this Fact Sheet.

[32] See: 40 CFR §122.28(b)(2), and other information in the Administrative Record.

Consistent with EPA's decision to issue a Two Step General Permit pursuant to 40 CFR 122.28(d)(2), MS4GP Part 1.4.4 also requires that a MS4 Permittee submit an Amended NOI whenever there is any material change in the information submitted in its original NOI or application materials, and/or as allowed or required by other provisions of the MS4GP.[33] For example, an amended NOI would be needed to request an alternative control measure (ACM) as provided in the permit. An amended NOI may also be required for to comply with requirements for discharges to impaired waters as required by MS4GP Part 4 (*Special Conditions*) and Appendix F (*Requirements for Discharges to Impaired Waters*). Further, EPA may request that a Permittee update or amend its NOI at any time. EPA will review any Amended NOI submitted by an applicant or Permittee to determine whether the information comports with the MS4 permit standard established in the MS4GP, and/or whether new permit terms and conditions must be established in response to the MS4-specific information. If EPA determines that new MS4-specific terms or conditions must be added to the MS4GP, such terms and conditions will be proposed by EPA for public comment and opportunity for public hearing according to NPDES permit procedures. See 40 CFR 122.28(d) and 40 CFR Part 124.

After the effective date of the MS4GP, EPA will review any NOIs from new MS4 applicants, and as appropriate will propose for public comment its decision to authorize the New MS4 Permittee through proposed modifications to MS4GP Appendices A, and F. EPA also includes a reserved MS4GP Appendix H to accommodate future permit modifications for other new MS4 Permittees.

### *5. Authorization to Discharge (MS4GP Part 1.5)*

A regulated small MS4 operator will be authorized to discharge under the MS4GP upon their receipt of EPA's written notification that EPA has granted permit coverage and has assigned the Permittee a unique permit number.

When an MS4 Permittee subsequently elects to submit Amended NOI information (as allowed and/or required by certain provisions of the MS4GP), EPA will review the information, develop unique terms and conditions for that MS4 Permittee as needed, and will provide opportunity for public comment and hearing on those proposed new or unique provisions. Upon completion of these public notice procedures, EPA will notify the MS4 Permittee in writing of the final enforceable terms and conditions applicable to that Permittee.[34]

[33] See discussion of MS4GP Part 2.9 elsewhere in this document.

[34] See: 40 CFR §122.28(d)(2)(iii).

### *6. Requirements for Individual NPDES Permits (MS4GP Part 1.6)*

If an otherwise eligible regulated small MS4 operator desires an individual permit, the operator may request to be excluded from coverage under the MS4GP by applying for an individual NPDES permit.[35] The operator must submit a written request to EPA no later than 90 days after the MS4GP effective date. Any request for an individual NPDES permit will be reviewed and processed by EPA in accordance with federal regulations at 40 CFR Part 124. EPA may grant the request for an individual NPDES permit if EPA agrees that the reasons cited by the small MS4 owner/operator clearly demonstrate that inclusion under the MS4GP is inappropriate.

In accordance with 40 CFR §122.28(b)(3)(i), EPA may determine that providing coverage under the MS4GP is inappropriate for a particular regulated small MS4, and may require the entity to apply for an individual NPDES permit. See MS4GP Part 1.6.3. The applicability of the MS4GP to a particular MS4 discharge is automatically terminated upon the effective date of an individual NPDES permit.

### *7. Notice of Termination Requirements under MS4GP Part 1.7*

A Permittee covered by the MS4GP may terminate permit coverage using the procedure outlined in MS4GP Appendix B.4 when/if a new operator has assumed responsibility for the entire MS4, and in turn the MS4 Permittee has ceased their operational control of the MS4. Termination of coverage under a NPDES permit is also available if the MS4 Permittee completely eliminates all discharges from their MS4.

To terminate coverage, the Permittee must submit a letter to the permitting authority describing the basis for the request to terminate, including sufficient detail to substantiate the reasons for the termination. In cases where co-Permittee relationships exist, coverage for the requesting Permittee may be terminated without affecting the coverage of the other co-Permittees subject to the permit.

***EPA requests public comment on the breadth, scope and adequacy of the provisions specified in MS4GP Part 1.1 through 1.7, in light of the other aspects of the MS4GP.***

## D. Discussion of the MS4GP's Limitations and Conditions

### *1. Discharges Authorized Under the MS4GP (Part 2.1)*

The MS4GP conditionally authorizes municipal storm water discharges, and certain types of non-storm water discharges, from the Permittee's MS4 within the Permit Area, provided that the Permittee complies with the terms and conditions of the MS4GP.

[35] See 40 CFR §122.28(b)(3)(iii), also 40 CFR 122.33(b)(2).

### *2. Other Conditional Requirements (MS4GP Parts 2.2 through 2.7)*

The MS4GP further limits the Permittee's authorization to discharge municipal storm water in the following ways:

- **MS4GP Part 2.2** states that it will be presumed that the Permittee is not causing or contributing to an excursion above the applicable Idaho Water Quality Standards if the Permittee complies with all terms and conditions of the MS4GP. The Permittee will reduce the discharge of pollutants from the MS4 to the MEP through the development, continued implementation, and enforcement of the provisions outlined in MS4GP Part 3 (*Storm Water Management Program Control Measures*). The Permittee will protect water quality by conducting certain actions tailored to their watershed's concerns and program capacity as directed Part 4 (*Special Conditions*) and Appendix F (*Requirements for Discharges to Impaired Waters*).

  Where monitoring or other information shows that a pollutant in the Permittee's MS4 discharge is causing or contributing to an excursion above the applicable Idaho water quality standard, Part 2.2 directs the Permittee to comply with the notification and other requirements outlined in Part 5 (*Required Response to Excursions of Idaho Water Quality Standards*). See further discussion of MS4GP Part 5 in Section III.G of this Fact Sheet.

- **MS4GP Part 2.3** states that snow disposal directly into waters of the United States, or directly to the MS4s, is prohibited. Accumulated snow and melt water in urban areas may contain elevated levels of chloride and other salts, suspended sediment, turbidity, and metals associated with sediment and turbidity. Discharges of snow melt resulting from snow disposal sites and/or associated with the Permittees' snow management practices (such as street plowing, and/or application of traction material) are conditionally authorized, provided such snow management sites & practices are conducted in a manner that minimizes adverse water quality impacts in accordance with Permit Part 3.4 (*Pollution Prevention/Good Housekeeping for Municipal Operations*).

  EPA recognizes that maintaining safe roads and highways for winter travel is a priority responsibility for some Permittees under the MS4GP, and requires the efficient removal of ice and snow from road surfaces. However, during the off-season, EPA expects the Permittee to closely consider their current practices in comparison to the wide variety of available research on effective snow management BMPs that are shown to reduce pollutants from melting snow and ice into waters of the United States. EPA expects those Permittees with responsibility over streets, roads, highways, and parking lots to consider and

evaluate using all reasonably practicable snow and ice management techniques that will reduce pollutants discharged from the MS4.

- **Part 2.4** states that storm water associated with industrial or construction activity (as defined in 40 CFR §122.26(b)(14) and (15)) may be discharged through the Permittee's MS4, only when such discharges are authorized by the appropriate general NPDES permit, or a separate individual permit (as necessary). To ensure that industrial/construction storm water discharged into the MS4 is permitted, the Permittee should educate those other site operators who discharge into the MS4 of the need to comply with the Clean Water Act and other applicable local ordinances.

- **Parts 2.5 and 2.6** define the types of discharges unrelated to precipitation events (i.e., "non-storm water discharges") that are conditionally allowed to enter into and thus discharged from the MS4s. Such allowable non-storm water discharges cannot be sources of pollution to the waters of the United States, consistent with the Idaho Water Quality Standards, as defined in MS4GP **Part 2.7**.[36] As described later in this document, MS4GP **Parts 2.8.4** and **Part 3.5.2** further require all Permittees to prohibit, through ordinance or other enforceable means, all other non-storm water discharges into the MS4(s).

EPA acknowledges that in some urban Idaho watersheds, non-storm water sources (in the form of landscape irrigation, springs, rising ground waters, and/or groundwater infiltration) may be routinely present as discharges from the MS4. The Permittee should refer to Section III.E.6 of this Fact Sheet and Part 3.5 of the MS4GP which further describes how a Permittee can determine whether a detected dry weather discharge from the MS4 is an allowable discharge.

***EPA requests public comment on the breadth, scope and adequacy of the provisions specified in MS4GP Parts 2.1 through 2.7, in light of the other aspects of the MS4GP.***

[36] Categories of non-storm water discharges listed in the MS4GP are consistent with those in 40 CFR §§ 122.34(b)(3)(iii). Additional text in MS4GP Part 2.6, beyond that in § 122.34(b)(3)(iii), is a result of input from IDEQ and the public on comparable provisions of prior MS4 permits in Idaho since 2006. Any discrepancy between allowable non- storm water discharges cited in a previously issued Idaho MS4 permit and the MS4GP is editorial, and the current version of the MS4GP prevails.

### *3. Permittee Responsibilities (MS4GP Part 2.8)*

**Permit Part 2.8.1** clarifies that each Permittee is independently responsible for permit compliance related to their MS4 and associated discharges.

**Permit Part 2.8.2** provides that Permittees may submit a joint NOI and participate in joint implementation of controls as co-Permittees.[37] A written agreement between the parties is required to clarify agreed-upon roles and responsibilities. Several MS4 Permittees and operators in the Boise, Pocatello, Lewiston, and Coeur d'Alene UAs previously identified through permit applications their intention to operate as co-Permittees and/or to share storm water control measure implementation responsibilities. EPA strongly encourages regulated small MS4 operators to work cooperatively whenever possible to conduct the mandatory storm water management control measures in a cost effective and productive manner.

**Permit Part 2.8.3** allows a Permittee to implement one or more of the control measures by sharing responsibility with an entity other than a regulated small MS4 Permittee.[38] The Permittee must enter into a written agreement with the outside party, in order to minimize any uncertainty about the entity's responsibilities to the Permittee. The Permittee remains responsible for compliance with the permit obligations in the event the other entity fails to implement the control measure (or any component thereof).

**Permit Part 2.8.4** requires regulated small MS4 operators to maintain adequate legal authority to implement and enforce the required SWMP control measures as allowed and authorized pursuant to applicable Idaho law.[39] Without adequate legal authority or other mechanisms that allow control over what enters or discharges from the MS4, the Permittee cannot perform vital storm water management functions, such as performing inspections, requiring installation and proper operation of pollutant control measures within its jurisdiction, and/or enforcing such requirements. EPA recognizes that highway districts and other special purpose entities do not have formal ordinance authority under Idaho law. In such cases, EPA expects the Permittee to utilize all relevant regulatory mechanisms available to it pursuant to applicable Idaho law to control pollutants into and from the MS4.

EPA expects all regulated small MS4 operators to use their existing legal powers in six specific ways. First, Permittees must effectively prohibit and eliminate pollutants to the MS4 from illicit discharges and connections. Permittees must effectively control spills,

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[37] See 40 CFR §§122.33(b)(1).

[38] See 40 CFR §122.35(a).

[39] See 40 CFR §§ 122.34(b)(3)(ii)(B), (b)(4)(ii)(A), and (b)(5)(ii)(B)); EPA 2010.

dumping or disposal of non-storm water materials into the MS4. The Permittee must have the ability to control pollutants discharged into the MS4 from land disturbance and development activities occurring within their jurisdiction. The Permittee must be able to control the contribution of pollutants from one MS4 into another, through interagency agreements as necessary or appropriate. The Permittee must be able to require compliance with applicable rules within their jurisdiction. Finally, the Permittee must have authority to carry out inspection, surveillance, and monitoring procedures necessary to determine compliance with the MS4GP.

Different types of Idaho organizations qualify as regulated small MS4 operators, and EPA recognizes that each type of entity has different and unique legal powers under State law. The scope of such legal authority may include enforcement through statute, ordinance, policy, permit, contract, administrative order, and/or other means. Where the Permittee does not have penalty authority, the Permittee should consider alerting other local or states entities that do have police powers to assist them in addressing problems.

Since Permittees may have different types of legal authority, each Permittee must summarize their legal authorities to control pollutants in their MS4 in their Storm Water Management Program (SWMP) Document required by MS4GP Part 2.8.5 – see additional discussion below. The SWMP Document must describe how they impose their requirements, and/or use cooperative agreements with neighboring jurisdictions, to implement the required storm water control measures based on their unique legal powers under Idaho law.

EPA has reviewed information previously submitted by the Existing MS4 Permittees and New MS4 Permittees listed in Appendix 1 of this Fact Sheet, and finds that these entities maintain sufficient legal authority to impose and enforce the required control measure components within their jurisdictions.

**Permit Part 2.8.5** requires each Permittee to develop, and update as necessary, a written SWMP Document. [40] The SWMP Document (or documents) summarizes the physical characteristics of the MS4, describes how the small MS4 operator conducts the required SWMP control measures within its jurisdiction. The SWMP Document should also describe the Permittee's unique implementation issues such as cooperative or shared responsibilities with other entities. The SWMP Document(s) address three audiences and purposes:

[40] See 40 CFR 122.34(b) and discussion of the relationship between the SWMP and required permit terms and conditions in EPA 2016(b) at pages 89339-89341. In contrast, the purpose of the Annual Report is to summarize the Permittee's activities during the previous reporting period, and to provide an assessment or review of the Permittee's compliance with the MS4GP.

1) General Public – The written SWMP serves to inform and involve the public in implementation of the local storm water management program;
2) EPA and IDEQ - The written SWMP provides the permitting authority a discrete document to review to understand how the MS4 Permittee will comply with permit requirements and implement its storm water management program; and
3) Elected officials and local staff - The written SWMP can potentially be used by the Permittee as an internal planning or briefing document.

The requirement for the MS4 Permittee to develop a SWMP Document is an enforceable condition of the permit. The contents of the SWMP Document are not directly enforceable as effluent limitations of the permit. (Note that a Permittee may specifically request under MS4GP Part 2.9 that portions of its SWMP Document be incorporated into the MS4GP as an Alternative Control Measure; see discussion in Section II.D.4 below.)

In general, because the details within a SWMP Document are not enforceable permit terms, the MS4 Permittee may create and revise the SWMP Document as necessary to describe how the Permittee meets any permit requirements during the permit term. Updates to the SWMP Document may therefore occur without EPA or IDEQ review and approval of each change as a permit modification.[41]

The first iteration of the MS4 Permittee's SWMP Document must be developed and available to EPA and the public by posting it on a publicly available website required by MS4GP Part 3.6 no later than the due date of the 1st Year Annual Report. If applicable, the SWMP Document must be updated to include any waterbody specific requirements pursuant to MS4GP Part 4 and Appendix F, no later than the due date of the 2nd Year Annual Report. Finally, the SWMP Document must be updated no later than 180 days prior to the expiration date of the MS4GP and submitted as part of the Permit Renewal NOI required by MS4GP Part 8.2, to reflect the Permittee's most up to date implementation of their control measures. MS4GP Appendix E provides a suggested format for the SWMP Document; and EPA notes that several small MS4 Permittees have already developed such summary documents.[42]

[41] See EPA 2016b, page 89339-89341.

[42] See, for example, SWMP plan documents authored by the City of Coeur d'Alene (http://www.cdaid.org/files/Engineering/Storm waterManagementPlan.pdf); City of Nampa (http://www.cityofnampa.us/DocumentCenter/View/1513); and Boise State University (http://www.partnersforcleanwater.org/media/182277/2014_boise_state_university_swmp.pdf). Other examples include the Cities of Bellevue, WA; Tacoma, WA; and/or available through the MS4GP Administrative Record.

**Permit Part 2.8.6** requires the Permittee to track indicator statistics and information to document and report on SWMP implementation progress.

**Permit Part 2.8.7** requires the Permittee to provide adequate financial support and staff capabilities to implement the SWMP control measures and other permit requirements. Permittees demonstrate compliance with Part 2.8.7 by fully implementing the requirements of the MS4GP. Permittees are not required to keep track of or report their implementation costs, though it might be appropriate for MS4 operators to track their investment in some manner. EPA believes that it would be helpful to have a better understanding of how much the Permittee spends to comply with the MS4 standard in the MS4GP.

The MS4GP does not require specific staffing or funding levels, thus providing flexibility and incentive for the Permittee to adopt the most efficient methods to comply with the permit requirements. EPA encourages Permittees to establish stable funding sources to support ongoing SWMP implementation, and enter into cooperative working relationships with other regulated small MS4s. Technical resources, such as the recently introduced *Water Finance Clearinghouse* developed by EPA's Water Infrastructure and Resiliency Finance Center, are available to help communities identify sustainable funding solutions. EPA supports comprehensive long term planning to identify investments in storm water infrastructure and system management that complement other community development initiatives and promote economic vitality.[43]

**Permit Part 2.8.8** requires each Permittee to extend their storm water control measures to all areas under their direct control when new areas served by the MS4 are annexed, or when areas previously served by the MS4 are transferred to another entity. Permittees must acknowledge and report changes in ownership or operational authority to EPA and IDEQ through the SWMP document and the Annual Reports, respectively. Permittees are reminded to make any associated revisions to MS4 system maps or other records as soon as possible.

***EPA requests public comment on the breadth, scope and adequacy of the provisions addressing Permittee responsibilities as specified in MS4GP Part 2.8.1 through 2.8.8, including the recommended SWMP Document Template, in light of the other aspects of the MS4GP.***

[43] See: https://www.epa.gov/waterfinancecenter and EPA's recommendations for long term storm water planning resources at https://www.epa.gov/npdes/stormwater-planning

### *4. Alternative Control Measure Requests (MS4GP Part 2.9)*

The MS4GP establishes storm water management control measures for all eligible small MS4 permittee discharges upon the MS4GP effective date. In keeping with the Two Step General Permit process described in 40 CFR §122.28(d)(2), EPA will allow a Permittee the discretion to submit one or more requests for Alternative Control Measures (ACM). Permittees can submit supplemental or individualized documents, plans, or programs that it deems to be equivalent to the comparable MS4GP provision, and information supporting the request as described in MS4GP Part 2.9.

EPA requires such ACM Requests to be submitted as part of an Amended NOI no later than 180 days after the MS4GP effective date.[44] It is necessary for EPA to consider ACM requests early in the permit term so that all parties (EPA, IDEQ, Permittee and the public) know what and how the relevant control measures will be implemented in the permit area during the permit term.[45] If a Permittee requests an ACM beyond 180 days from the permit effective date. the Permittee may submit a request to modify the MS4GP pursuant to traditional NPDES provisions in MS4GP Part 8.1.

EPA will review all submitted ACM requests, and determine whether the ACM is equivalent to the permit requirement in the MS4GP. If EPA accepts the request, EPA will propose for public comment and hearing any unique, MS4 Permittee-specific requirements that reflect the ACM. Based on public comments received, EPA may then choose to formally establish the unique MS4-related information as one or more enforceable permit provisions.[46]

A Permittee may choose to request one or more ACMs for the SWMP control measure components outlined in MS4GP Part 3. See Table 2 of this Fact Sheet. Multiple ACMs may be requested by a single Permittee in a single Amended NOI. One or more ACMs may be requested by a group of co-Permittees in a single Amended NOI. The opportunity for requesting ACMs relative to any of the program components in Part 3 is meant to offer maximum flexibility to the Permittee.

If the Permittee's MS4 discharges to an impaired water, the Permittee must submit documents, plans or programs as directed by the relevant Permittee-specific provisions in Appendix F. The opportunity for ACMs relative to monitoring/assessment and pollutant reduction activities referenced in Appendix F offers maximum flexibility to the Permittee within a given watershed to work independently or together with others to conduct reasonable, meaningful, and necessary actions that reduce pollutants from the MS4 and protect water quality.

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[44] New MS4 applicants seeking coverage after the permit effective date may include their rationale for ACMs as part of the SWMP Document required as part of a complete NOI submittal.

[45] MS4GP Part 8.1 states that no GP provision is stayed until the modification process, or 2nd step MS4 GP revision to recognize the ACM, is complete.

[46] EPA 2016b.

***EPA requests public comment on the scope and adequacy of the ACM request provision specified in MS4GP Part 2.9, in light of the other aspects of the MS4GP.***

## E. Discussion of the MS4GP's Storm Water Management Program Control Measures *(MS4GP Part 3)*

### *1. Overview*

**MS4GP Part 3** contains the clear, specific, and measurable requirements to address the required minimum control measures in 40 CFR §122.34(a) and (b). For each minimum control measure, specific tasks, BMPs, design requirements, performance requirements, adaptive management requirements, schedules for implementation and maintenance, and/or frequency of actions are outlined. The specific actions and ongoing activities that comprise the minimum control measure are referred to as SWMP *program components.*

The previously issued individual MS4 permits in Idaho each required implementation of the SWMP control measures during the first permit term. Existing MS4 Permittees (listed in MS4GP Appendix A) are implementing minimum control measures within their jurisdiction as articulated in their original permits (and based on their specific legal authorities as authorized pursuant to applicable Idaho law). New MS4 Permittees (listed in MS4GP Appendix A.2) have submitted permit applications to EPA to describe their intended actions and activities, including estimated timelines for full SWMP implementation. EPA considered the existing SWMP programs, and the proposed programs submitted by the new permit applicants, during the development of the MS4GP terms and conditions.[47]

For Existing MS4 Permittees, EPA has incrementally refined the specific program components beyond the prior first term permit(s) to iteratively clarify the MS4 permit standard through expectations of what constitutes an adequate level of MS4 Permittee effort necessary to reduce pollutants from regulated small MS4s in Idaho.

For new MS4 Permittees, the MS4GP also establishes the MS4 permit standard in Idaho through appropriate storm water management expectations necessary to reduce pollutants from regulated small MS4s.

EPA recognizes that each regulated small MS4 is unique, and that each MS4 operator has different circumstances for storm water management and pollutant control. To address these unique circumstances, the MS4GP allows implementation flexibility with the need for clear, specific, and measurable permit requirements.

[47] See 40 CFR § 122.34(a)(2).

### *2. Compliance Dates (MS4GP Part 3.1)*

In MS4GP Part 3.1, EPA summarizes program implementation expectations for both Existing and New MS4 Permittees over the five year permit term.

Existing MS4 Permittees must continue to conduct their current SWMP controls upon the permit effective date; at that time, Permittees are expected to begin to integrate or develop revised or new activities to fully comply with the MS4GP no later than 180 days prior to the permit expiration date. New MS4 Permittees named in MS4GP Appendix A must begin to develop and implement their SWMP activities in compliance with the MS4GP no later than the permit effective date, and are expected to fully comply with the MS4GP requirements no later than 180 days prior to the permit expiration date.[48] The MS4GP provides this interim flexibility to allow the Permittee the broadest possible discretion for implementation.

[48] EPA will specify implementation schedule deadlines for any new MS4 applicants seeking coverage after the permit effective date as part of the permit authorization procedures.

## Table 2: *MS4GP Storm Water Control Measures and Associated Components*

For each individual control measure subsequently identified in Permit Parts 3.2 through 3.6, EPA identifies the compliance dates upfront, as well as the deadline by which any optional ACM Request must be submitted. (For example, see Permit Parts 3.2.1, Part 3.3.1, Part 3.4.1, etc.)

NPDES regulations allow small MS4 operators covered by permit for the first time up to 5 years (i.e., the duration of the first full permit term) to fully implement the required SWMP control measures.[49]

Permittees must demonstrate that they have met the respective compliance dates through the submittal of the Annual Reports (using the recommended format provided in MS4GP Appendix E or equivalent), and through submittal of a NPDES Application Renewal NOI as directed by MS4GP Part 8.2.

***EPA requests public comment on the breadth, scope and adequacy of the compliance dates specified in MS4GP Part 3.1, in light of the other aspects of the MS4GP.***

### *3. Construction Site Runoff Control (MS4GP Part 3.2)*

This SWMP control measure requires the regulated small MS4 operator to control construction site runoff discharges into their MS4s. See 40 CFR §122.34(b)(4).

The expired individual small MS4 permits in Idaho required the Existing Permittee to use an ordinance or regulatory mechanism to require proper construction site controls for sediment, erosion, and waste management at sites with land disturbance of one or more acres, (and also apply these controls to sites disturbing less than one acre, but that are part of a common plan of development that exceeds one acre.) As cited in 40 CFR § 122.34(b)(4), the minimum control measures must also include procedures for site plan review that considers potential water quality impacts; procedures for site inspection and enforcement; and procedures for the receipt and consideration of information submitted by the public.

These basic requirements continue as mandatory components under the MS4GP. However, requiring preventative construction site runoff controls only at sites disturbing greater than 1 acre within the MS4 Permit Coverage Areas is insufficient to protect water quality in Idaho.

**MS4GP Part 3.2** requires the Permittee to specify erosion, sediment, and water management controls for active construction sites that result in land disturbance of 5,000 square feet ($ft^2$) or more.

[49] See: 40 CFR §§122.34(a)(1) and 123.35(e).

The MS4GP further defines minimum expectations for the Permittee to inspect and enforce such requirements at active sites, by requiring preconstruction site plan review, inspection, and enforcement of controls at construction sites disturbing >1 acre.
To address concerns associated with cost of plan review, inspection, and enforcement of controls at a greater number of sites within their jurisdictions, the MS4GP only requires Permittees to review plans, inspect or actively enforce erosion, sediment and waste management control requirements on sites disturbing 1 acre or more. EPA expects that Permittees will use their discretion to prioritize and scale their applicable site plan review procedures, site inspections, and enforcement activities as appropriate to their jurisdiction.

EPA is using its discretion to require the Permittee to establish specifications for construction site runoff controls at *sites disturbing 5,000 $ft^2$ or more* instead of only from *sites disturbing one acre or greater… including construction activity disturbing less than one acre if the construction is part of a larger common plan of development of sale that would disturb one acre or more* to reduce pollutants and protect water quality in UAs across Idaho for the following reasons:

- Uncontrolled storm water discharges from urban development and construction activity negatively impacts receiving waters. EPA has previously stated that water quality impact from small construction sites is as high as or higher than the impact from larger sites on a per acre basis, and the concentration of pollutants in the runoff from smaller sites is similar to the concentrations in the runoff from larger sites. The proportion of sediment that makes it from the construction site to surface waters is likely the same for larger and smaller construction sites in urban areas because the runoff from either site is usually delivered directly to the storm drain network where there is no opportunity for the sediment to be filtered out. Further, during the active construction period has been found to result in up to 75 times more sediment than a similar size site either before or after construction.[50] In order to comprehensively prevent pollutants from the wide variety of construction activities occurring within the Idaho MS4 Permit Coverage Areas, it is necessary that Permittees specify the use of reasonable erosion, sediment, and waste management controls at a greater number of construction sites in the urban setting.

- Using only a "1 or more acres" site size threshold to trigger a Permittee's erosion, sediment and waste management controls results in pollutant controls at relatively few individual construction sites in the Idaho MS4 Permit Coverage Areas. However, U.S Census data reflects that approximately 41% of the single family residential lots in the

[50] EPA 1999 (page 68728 - 68731); EPA 2009d.

Western United States are 7,000 square feet or less.[51] Census data also confirms that proportionally more local building permits are issued to small lot size construction projects in urban areas.[52]

- Preventing the discharge of sediment, and other pollutants, from smaller sized construction sites increases water quality protection and is more cost effective than treating runoff from the MS4.[53] It is widely acknowledged that nutrients bind to sediment particles and are transported into the water column via erosion and sedimentation. Effective erosion and sedimentation controls, (such as techniques for construction sequencing, and vegetative – or non-vegetative stabilization) at smaller sized construction projects that disturb less than 1 acre and discharge through the MS4 will better control pollutant loading, consistent with applicable TMDLs, and/or pollution prevention principles for discharges to surface waters.

- It is reasonable for the Permittee to recognize differences between types of construction activity occurring in its jurisdiction, and to tailor its recommended pollutant control specifications for its geography and weather patterns.[54] Each Permittee is unique, and the Permittee can be allowed the flexibility to determine the scope and extent of erosion, sediment, and onsite waste management controls based on site size, type of construction, location/distance from the MS4, and/or other relevant factors.

- All regulated small MS4s in Idaho (except in the Idaho Falls UA) discharge to waterbodies impaired for sediment, siltation, nitrogen, and/or total phosphorus. Requiring construction site-level erosion, sediment, and waste controls at a greater number of sites, in MS4 Permit Areas discharging to impaired waters is consistent with

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[51] U.S. Census: http://www.census.gov/construction/chars/pdf/lotsize.pdf

[52] U.S. Census: Building Permits Survey > Permits by Metropolitan Area, https://www.census.gov/construction/bps/msamonthly.html

[53] EPA 1999, pages 68758-68759; EPA 2009a, pages 7-3 through 7-26.

[54] Examples of communities that have established appropriate controls for small sized construction sites include the City of Lincoln, Nebraska (provides options for scaled erosion and sediment controls appropriate for smaller single lots- See: http://www.lincoln.ne.gov/city/pworks/watershed/erosion/noi-swppp-lot.htm) and City of Bozeman, Montana, (also specifies cost effective BMPs for different construction sites types and sizes, including single family residential sites: see: https://www.bozeman.net/home/showdocument?id=4739). See also EPA 2015b. Additional references are available in the Administrative Record.

pollution prevention principles. Further, where applicable TMDLs and TMDL implementation plans exist, requiring Permittees to require the effective use of erosion and sediment controls is consistent with the assumptions and TMDL analyses for those receiving waters.[55] Controlling pollutants in runoff from additional construction sites will prevent sediment-laden runoff, and will contribute overall to the attainment of Idaho Water Quality Standards in all impaired receiving waters listed in Appendix 5 of this Fact Sheet.

- Requiring site level controls at smaller construction sites in the MS4 Permit Area surrounding Idaho Falls will also serve to appropriately protect existing water quality for the Snake River and its tributaries within the Idaho Falls UA.

Each program component of the Construction Site Runoff Control Measure is described below:

**Permit Part 3.2.1** provides a compliance deadline of four years and six months from the permit effective date for MS4 operators to update their existing program, if needed, to impose any new program components within the Permit Area. This section also defines the date by which any ACM Request must be submitted**.**

This timeframe allows sufficient time for all Permittees to work with their stakeholders, as necessary, to amend existing local requirements if needed. Many existing MS4 operators already impose appropriately-scaled erosion and sediment control requirements on construction sites that disturb less than 1 acre.[56] If the Permittee must revise their existing program to specify an appropriate level of erosion & sediment control requirements on smaller disturbance areas, EPA recognizes that different levels of effort will likely be necessary depending on the type of Permittee/MS4 operator. For example, a city may need more time to revise a local ordinance, whereas a highway district, college, or university may need comparably less time to amend its applicable contract or policy language. EPA recommends that regulated small MS4 operators within the same UA will work together in a cooperative manner to define appropriately-scaled and reasonable construction site control requirements to find efficiencies, and to speed implementation.

**Permit Part 3.2.2** outlines the expected scope of the MS4 operator's legal mechanism program to reduce and prevent runoff from construction sites in its jurisdiction that disturb

[55] Each of the applicable TMDL documents communicate the expectation that responsible parties (including regulated MS4 operators) should better control total suspended sediments and/or nutrients from sources within their respective jurisdictions.

[56] For example, Pocatello, Chubbuck, Nampa, Caldwell, Coeur d'Alene, and Post Falls each require erosion & sediment controls at any construction site within their jurisdiction. See EPA's *Permittee Summary Information* in the Administrative Record. See additional discussion elsewhere in this Fact Sheet.

5,000 square feet ($ft^2$) or more; the legal mechanism must allow the Permittee to review site plans and enforce the requirements at construction sites disturbing 1 or more acres.

**Permit Part 3.2.3** requires written specifications to define the appropriate site level controls for construction activities within the Permittee's jurisdiction. EPA clarifies that the type and extent of site-level erosion, sediment, and waste management controls will likely be different depending on site size and location. Therefore, the Permittee has the discretion to determine how best to control sediment and other pollutants in runoff from these small sites.

**Permit Part 3.2.4** requires a preconstruction site plan review process to address construction project site activity, at a minimum, at sites that will result in land disturbance of one (1) or more acres, and includes consideration of public input, consistent with 40 CFR 122.34(b)(4) (D) and (E). This review can be conducted using a checklist or similar process to consider and address potential water quality impacts from the site activities. Allowing MS4 Permittees to limit their review and enforcement of such requirements to larger sites respects the Permittee's investment of time and cost associated with such oversight activities.

**Permit Part 3.2.5** requires, at a minimum, that the Permittee conduct prioritized construction site inspections and to enforce the applicable local requirements as needed. At a minimum, the Permittee must inspect and enforce their requirements at construction sites occurring in their jurisdictions that disturb 1 or more acres.

**Permit Part 3.2.6** requires the Permittee to develop a written enforcement response policy or plan to guide and prioritize such oversight, inspection, and enforcement efforts.

**Permit Part 3.2.7** requires the Permittee to provide proper training for construction staff conducting plan review and inspections.

***EPA requests public comment on the breadth, scope and adequacy of the construction site runoff control requirements in MS4GP Part 3.2, in light of the other actions required by the Permit.***

### *4. Storm Water Management for Areas of New Development and Redevelopment*

**Permit Part 3.3** requires Permittees to implement and enforce a program to control runoff from new development and redevelopment project sites, including projects involving streets and roads. In the previously issued individual permits, these requirements were entitled *Post-Construction Storm Water Management in New Development and Redevelopment.*

The expired permits required such controls at sites disturbing 1 or more acres, by directing the Permittee to address runoff from new development and redevelopment projects using a locally appropriate combination of structural and/or non-structural BMP requirements.[57] The Permittee must enforce the requirements using an ordinance or other regulatory mechanism, to the extent allowable under state or local law, and ensure the adequate long-term operation and maintenance of these BMPs.[58]

In the MS4GP, EPA has revised the title of the control measure to *Storm Water Management for Areas of New Development and Redevelopment,* to reflect EPA's current expectations with regard to implementation of the measure. EPA uses the term "permanent storm water controls" in the MS4GP instead of "post-construction storm water management controls" to mean those controls that will treat or control pollutants in storm water runoff from the development site on a permanent basis after construction is complete.

It necessary to require the MS4 Permittee to specify appropriate site level storm water management controls - where feasible- at a greater number of development sites within densely populated urban watersheds to address continued water quality impairments for receiving waters named in the MS4GP, and protect water quality in waters that are not impaired. Therefore, EPA has established a site disturbance threshold of 5,000 square feet to trigger the Permittee's consideration and application of appropriate permanent storm water controls.

However, as with the Construction Site Runoff Control Measure, the MS4GP requires that, at a minimum, Permittees review site plans, inspect high priority locations, and enforce their requirements for permanent storm water controls at sites that result from land disturbance of one (1) acre or more. Other components of the Storm Water Management for Areas of New Development and Redevelopment Control Measure are discussed below, followed by further explanation of EPA's rationale for these components:

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[57] "Non-structural requirements" include, but are not limited to, planning, zoning, and other local requirements such as buffer zones. "Structural controls" include, but are not limited to, the use of storage, infiltration basins, or vegetative practices such as rain gardens or artificial wetlands. *See*: 40 CFR§122.34(b)(5)(iii).

[58] See EPA 2012; EPA 2009; 40 CFR §122.34(b)(5).

**Permit Part 3.3.1** establishes a compliance deadline of 4.5 years from the permit effective date for MS4 operators to update their existing runoff control program, as needed, to impose any new program components within the Permit Area. This timeframe is justified to allow Permittees the flexibility to adjust their existing programs as necessary within their Permit Area. This section also defines the date by which any ACM Request must be submitted**.**

**Permit Part 3.3.2** requires the Permittee to update their legal regulatory mechanism to incorporate an on-site retention standard for new development and redevelopment sites. The purpose of this requirement is to prevent the creation of excess storm water discharges- and pollutant loadings- from the impervious surfaces associated with the urban development. Use of onsite storm water management controls at these sites proactively protects Idaho receiving waters, and ensures that such water quality protections continue over the long term.

Part 3.3.2 allows for alternative mitigation or treatment alternatives in situations where complete on-site retention of the target volume is infeasible. The Permittee may apply an alternate standard if that alternative is deemed to be equally protective, or more protective, to the onsite storm water management design standard as articulated in the MS4GP. For example, alternative local compliance with the Permittee's calculated storm water management design standard could take the form of off-site mitigation or payment in lieu programs. The Permittee could consider creating an inventory of appropriate alternative storm water management techniques, and/or using planning mechanisms (such as completed sub-watershed plans or other appropriate means) to identify priority areas within sub-watersheds of their jurisdiction(s) where off-site mitigation, and/or public storm water mitigation projects, may be implemented.

**Permit Part 3.3.3** requires the Permittee to maintain written specifications for the permanent storm water controls for development sites allowed by the Permittee within their jurisdiction. These specifications are required to be utilized at sites disturbing at least 5,000 square feet.

**Permit Part 3.3.4** requires the Permittee to review and approve site plans for permanent storm water controls, at a minimum, at sites resulting from land disturbance of one (1) or more acres. Specific standards are a critical component of the program, but even the best local requirements must be supported by a review component to ensure that the locally established performance standards are met. To comply with this requirement, the Permittee must have the authority to withhold approvals when it determines that the controls at a specific site are not designed to meet the established standards for permanent storm water control.

**Permit Part 3.3.5** outlines the requirement for the Permittee to inspect and enforce their requirements for permanent storm water controls, at a minimum, at sites resulting from land disturbance of one (1) or more acres. Inspection of permanent control measures is key to ensuring water quality protection over the long term. Without periodic inspection or maintenance, the permanent controls can become pollutant sources, rather than a means of preventing pollutant loading. An effective local inspection process, combined with appropriate enforcement if necessary, ensures that onsite controls are built according to approved plans and specifications, and that proper materials and installation techniques are used. EPA expects the Permittee to prioritize their inspection and enforcement to include any new permanent storm water controls installed after the permit effective date.

**Permit Part 3.3.6** requires the Permittee to ensure the long-term operation and maintenance (O&M) of permanent storm water controls. EPA requires the Permittee to use a database inventory to track and manage the operational condition of permanent storm water controls within its jurisdiction. This can take the form of a computerized maintenance management system or asset management system that allows for the electronic logging of O&M tasks. Ongoing maintenance is necessary to ensure that the BMPs will perform as designed over time. Inadequate maintenance of existing storm water management controls is the primary shortcoming for most local storm water management programs across the country. As with any infrastructure, deferred maintenance can increase costs and negatively affect receiving waters. Unmaintained BMPs will ultimately fail to perform their design functions, and can become a nuisance and/or pose safety problems.[59] The Permittee must track those permanent controls which are known to them, or for which they accept ownership, beginning no later than the permit effective date.

**Permit Part 3.3.7** requires the Permittee to ensure that their staff are sufficiently educated regarding the selection, design, installation, operation, and maintenance of permanent storm water controls.

MS4GP Part 3.3 will improve upon the site design specifications, guidelines, and other policy documents that are currently required by MS4 Permittee jurisdictions in Idaho. The purpose of requiring an onsite storm water design standard is to maintain or restore stable hydrology in nearby receiving waters, and to better protect water quality from MS4 discharges in Idaho UAs.

It is well understood nationally that uncontrolled runoff from new development and redeveloped areas negatively affects receiving water bodies.[60] Pavement and other impervious surfaces in urban settings prevent infiltration, and resulting runoff increases in both volume and velocity, which in turn causes the erosion of stream banks and scouring of streambeds. Fine

[59] Hirschman & Kosco 2008; see Chapter 9.

[60] EPA 1985; EPA 1999.

sediments and pollutants from automobiles, landscape pesticides, and fertilizers enter waterbodies, and can damage fish spawning areas and other aquatic habitat. Where traditional storm water management practices typically employ engineered, end-of-pipe practices, (that tend to control only peak flow rates and total suspended solids concentrations), such conventional practices typically fail to address widespread and cumulative hydrologic modifications within a watershed that increase runoff volumes and rates, causing excessive erosion and stream channel degradation. Traditional practices also fail to treat runoff for nutrients, pathogens, and metals pollutants typically found in urban settings.[61]

Permanent storm water control measures that involve prevention- such as product substitution, better site design, downspout disconnection, and conservation of natural areas - as well as watershed and land use planning, can dramatically reduce both the volume of runoff and pollutant loads from new development and redevelopment. In particular, site-level storm water control measures that harvest, infiltrate, and evapotranspire storm water runoff are critical to reducing the volume and pollutant loading associated with smaller storms. [62]

"Green Infrastructure" (GI) or "green storm water infrastructure" (GSI), are terms used to describe the type of permanent storm water management techniques that are cost-effective, sustainable, and environmentally friendly. Such techniques, including site level "Low Impact Development" (LID) practices, at new development or redevelopment projects involve both storm water management and land development strategies emphasizing conservation and integration of natural features with small scale engineered hydrologic controls to more closely mimic predevelopment hydrologic function. A comprehensive approach to long-term storm water management using GI/GSI, and LID seeks to:

- Preserve, protect and enhance natural landscape features, such as undisturbed forests, meadows, wetlands, and other undisturbed areas that provide natural storm water management;
- Reduce overall land consumption, and use land efficiently, to reduce total watershed or regional impervious cover;
- Recycle land by directing new development to already degraded land, e.g., parking lots, vacant buildings, abandoned malls; and
- Direct storm water into the ground near where it fell through infiltration, prevent rainfall from falling to the ground through interception, return water back to the

[61] Shaver, et al., 2007. Holz, 2008; and Horner, 2008.

[62] NRC 2008.

> atmosphere through evapotranspiration, and/or otherwise manage storm water through reuse techniques.[63]

Since 2008, EPA has advocated for local MS4 jurisdictions to employ a volume-based approach to storm water management at new development and redevelopment sites. This approach includes requirements for the design, construction, and maintenance of permanent storm water practices that manage rainfall on-site, and generally prevent the off-site discharge of the precipitation from all rainfall events below a certain size. EPA considers a volume-based storm water management approach to be appropriate in the MS4GP for Idaho because it directly addresses the need to maintain and, where necessary, to restore the predevelopment hydrology for duration, rate, and volume of storm water flows. Further, such techniques are widely acknowledged as a means of preventing pollutants from entering the receiving water in the first place.

Many GSI/LID strategies involve bioretention, or infiltrating runoff through soil. Bioretention practices include use of porous pavements, green roofs, bioswales, and rain gardens. Various studies confirm the effectiveness of GSI/LID practices to reduce contaminants, restore hydrology, and protect the health of aquatic species. Research and on-the-ground experience suggests that all LID practices can perform effectively in a wide variety of geographic areas as long as procedures for proper design, implementation, and maintenance are established and followed.[64]

Many Permittees in Idaho currently require onsite retention and infiltration practices at development sites within their jurisdictions, and integrate aspects of a GSI/LID approach for such new development and redevelopment sites. While existing Permittees are familiar with controlling storm water on new development and redeveloped sites based on requirements imposed during the previous NPDES permit term, EPA is now requiring a consistent, statewide design approach to comprehensively address post-construction storm water discharges.

The MS4GP requires the Permittee to use their local ordinances or regulatory mechanisms to require the volume of water from storms $\leq 95^{th}$ percentile event to be managed entirely onsite, and not discharged to surface waters, in order to fully protect Idaho receiving waters. The *$95^{th}$ percentile rainfall event* is the rainfall event that is greater than 95% of all rainfall events over a period of record (typically using a minimum 30-year period of record). In

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[63] See: American Rivers 2013; EPA 2006*;* EPA 1999*,* at pages 68725 – 68728 and 68759; EPA, et al., 2007; and EPA 2009.

[64] For example, see Ahiablame, et al, 2012; Spromberg, J.A. et al. 2016; and McIntyre, J.K, et al. 2016; and other references in the Administrative Record.

general, this calculation excludes extremely small rain events that are ≤0.1 of an inch of rainfall or less (because such small rainfall events typically do not result in any measurable runoff due to absorption, interception, and evaporation by permeable, impermeable, and vegetated surfaces).[65]

EPA calculated example target design storm volumes as illustrated below. Using available 24--hour precipitation data through 2012 from the National Oceanic and Atmospheric Administration, analyzed the average rainfall depth occurring in the MS4 Permit Areas. See Table 3 below. Statewide, approximately 95% of all storms occurring in the MS4 Permit Areas result in rainfall volumes of approximately 0.82 inches or less, ranging between 0.57 inches to 0.82 inches.

**Table 3:** ***Analysis of the 95th Percentile Storm Runoff Volumes for Idaho MS4 Permit Areas***

| Urbanized Area/ Permit Area | Rainfall Depth (in) | NOAA Station Location; Period of Record |
|---|---|---|
| | 95th | |
| Coeur d' Alene | 0.81888 | *COEUR D ALENE, ID (GHCND:USC00101956); 1895-2012* |
| Moscow | 0.8188 | *MOSCOW U OF I, ID (GHCND:USC00106152); 1893-2012* |
| Caldwell | 0.6102 | *BOISE AIR TERMINAL, ID (GHCND:USW00024131); 1940-2012* |
| Nampa | 0.5708 | *NAMPA 2 NW, ID US ZIP:83687; 1948-2012* |
| Boise | 0.6102 | *BOISE AIR TERMINAL, ID (GHCND:USW00024131); 1940-2012* |
| Lewiston | 0.6299 | *LEWISTON NEZ PERCE CO AIRPORT, ID (GHCND:USW00024149); 1940-2012* |
| Pocatello | 0.6495 | *POCATELLO REGIONAL AIRPORT, ID (GHCND:USW00024156); 1939-2012* |
| Idaho Falls | 0.688 | *IDAHO FALLS, ID 83402 ZIP:83402; 1913-2012* |

EPA recommends the 95th percentile storm volume be calculated for a given MS4 Permit Area at the start of the MS4GP term and revisited at the reissuance of the MS4GP so that a consistent standard is applied for the duration of the permit cycle.

Using a design standard for onsite storm water retention in the MS4GP, expressed as a calculated runoff volume, acknowledges the predicted, incremental increase in storm event volumes in Idaho, and is preferable to using a single, static statewide rainfall amount (e.g.,

[65] See: Hirschman and Kosco, 2008.

"0.6inches total rain"), or a volume calculated from a statistical storm frequency return interval using historic rainfall data. EPA has evaluated the potential extreme storm event return interval for 24-hour storm events in each of the Idaho MS4 Permit Areas.[66] The evaluation reflects estimated changes in rainfall patterns over 30-year averages, centered around the years 2035 and 2060, as compared to historical or present-day conditions. Under all evaluated scenarios, the predicted trends in Idaho MS4 Permit Areas show a general increase in ambient temperatures throughout the calendar year, and increased storm magnitude for all return frequencies (i.e., the 5 year, 10 year, …, and 100 year events). The evaluation also suggests significantly decreased summer precipitation statewide, balanced by increased precipitation during other seasons. Expressing the design standard for onsite storm water retention in MS4GP Part 3.3 as a calculated runoff volume therefore defines a feasible performance standard for permanent storm water control at new development and redevelopment that will protect Idaho water quality over the long term.

***EPA requests public comment on the breadth, scope and adequacy of the storm water management requirements in MS4GP Part 3.3, in light of the other actions required by the permit.***

### *5. Pollution Prevention/Good Housekeeping for MS4 Operations (MS4GP Part 3.4)*

Municipal operation and maintenance is an integral part of any SWMP, and, when coupled with good housekeeping and pollution prevention principles, reduces the risk of water quality problems from MS4 discharges. The minimum requirements for this control measure are set forth in 40 CFR §122.34(b)(6). These provisions require the implementation of an operation and maintenance program that includes a staff training component, and articulates as its goal the prevention or reduction of pollutant runoff from municipal operations. EPA has retitled this mandatory requirement *Pollution Prevention/Good Housekeeping for MS4 Operations,* in acknowledgement of the broad and inclusive scope of this control measure.

Existing Permittees have been required to develop and implement an operation and maintenance program "intended to prevent or reduce pollutant runoff from municipal operations;" to develop an employee training program; and to prepare site-specific storm water pollution prevention plans (SWPPPs) at the Permittee's own maintenance buildings and similar facilities.

[66] EPA Region 10's analysis of the extreme storm event return interval for the Idaho MS4GP Permit Areas is available as part of the Administrative Record. EPA used a risk assessment application designed to help water utilities in adapting to extreme weather events through a better understanding of current and long-term weather conditions; it is available online at https://www.epa.gov/crwu/build-resilience-your-utility.

**Permit Part 3.4** requires that all Permittees properly operate and maintain their MS4s, associated Permittee-owned/operated facilities, and related activities, to prevent or reduce the discharge of pollutants from the MS4. Since roads and streets function as an integral part of the drainage conveyance systems in Idaho UAs, EPA has included explicit provisions for appropriate storm water management through operation and maintenance activities for roads, streets, highways and parking lots. See Part 3.4.4 of the MS4GP.

In the existing small MS4 permits for Idaho, the requirement to map the MS4 pipes and outfalls were set forth in the permit section related to illicit discharge detection and elimination (IDDE). Because maintaining an updated MS4 map directly reflects the overall understanding and management of the storm water/MS4 infrastructure, EPA has moved the requirement for MS4 mapping into this section of the MS4GP.

All Permittees must continue to focus on maintenance of their Permittee-owned portions of the MS4s to protect water quality. Because of the diverse nature of the Permittees' MS4 facilities (which include the streets and parking lots, but also storm water ponds, underground pipes, drainage ditches, etc.), appropriate procedures and schedules for inspection and maintenance are necessary for each type of infrastructure/facility. The operating procedures should include some manner or protocol for testing and safely disposing of any waste materials collected from catch basins or other infrastructure and any associated decant water.

Individual program components of the Pollution Prevention/Good Housekeeping control measure that EPA believes to be reasonable and important Permittee responsibilities, are summarized below:

**Permit Part 3.4.1** establishes a compliance deadline of 180 days before the expiration date for all Permittees to update their existing runoff control program(s), and/or to impose any new program components, within the Permit Area. EPA believes this timeframe is justified to allow Permittees adequate opportunity to adjust their existing programs, as necessary, and ensure the required actions are sufficiently addressed within the Permit Area. This section also defines the date by which any ACM Request must be submitted**.**

**Permit Part 3.4.2** continues to require all Permittees to maintain a current MS4 map, and has added a requirement for an accompanying MS4 Inventory of the features that comprise the MS4 system.

EPA has refined the expected content of the MS4 Outfall Map and Inventory, and requires these updated materials be submitted to EPA as part of the Permit Renewal NOI pursuant to MS4GP Part 8.2. The purpose of the MS4 Outfall Map and Inventory is to record and verify MS4 outfall locations and include other relevant descriptive characteristics of the system. EPA expects each Permittee to know the locations and characteristics of all outfalls that it owns/operates through mapping their infrastructure and associated assets. Part 3.4.2 sets forth the scope of information that should be maintained by the Permittee. Permittees

are encouraged to couple this Inventory with other control measures, such the dry weather screening and investigation requirements in the subsequent Permit Part 3.5, to prioritize their SWMP implementation activities during the permit term. Any necessary inspection and/or maintenance of the MS4 can be prioritized and determined by the Permittee.

EPA has added a specific data element for the MS4 Outfall Map and Inventory component to acknowledge and characterize any MS4 outfalls that have ongoing dry weather flows identified by the Permittee as being caused by irrigation return flows and/or groundwater seepage. Knowing both the location, and characteristics, of such outfalls is needed in areas where the MS4 discharges to phosphorus- and/or nitrogen- impaired waters listed in Appendix F. The Outfall Map and Inventory can be collectively reassessed by IDEQ, EPA, and the Permittee at the time of the MS4GP renewal to better tailor the relevant control measures during the next permit term to address locations where non-storm water discharges may be contributing to the impairment.

**Permit Part 3.4.3** outlines the requirements for the inspection of all Permittee catch basins and inlets within the MS4 at least every five years, and requires appropriate cleaning and/or maintenance action based on those inspections.

**Permit Part 3.4.4** requires Permittees to review and update their operation and maintenance procedures for streets, roads, highways, and parking lots that are owned, operated, and/or maintained by the Permittee to ensure procedures are protective and reduce pollutants through the MS4. Such review of the applicable O&M procedures will ensure such actions are, or continue to be, protective of water quality and reduce the discharge of pollutants through the MS4.

Part 3.4.4.1 also requires that Permittees consider how and whether excessive amounts of landscape irrigation enters the MS4. Excessive landscape watering can contain fertilizers and other compounds that, when discharged through the MS4. into nutrient-impaired waters., can increase pollutant loading (nitrogen & phosphorus) into impaired waters. Landscape irrigation can be considered an allowable non-storm water discharge only when it is not a source of pollution under the Idaho WQS. See MS4GP Parts 2.5.5, 2.6.2 and 2.7. Part. 3.4.4.1 provides maximum flexibility for the Permittee to consider using water conservation measures to address landscape watering entering the MS4 to prevent pollutant discharges into any nutrient-impaired waters.

**Permit Part 3.4.5** requires Permittees with street maintenance responsibilities to ensure that road material stockpiles (such as sand, salt, or sand with salt stockpiles) are managed in a manner that prevents pollutants in runoff from discharging to the MS4 or into any receiving waterbody. Permittees without street maintenance responsibilities do not have an obligation to comply with this provision. An inventory of all such street materials must be maintained. No later than 180 days prior to the permit expiration date, as part of the Permit

Renewal NOI required by MS4GP 8.2, the Permittee must assess each of their Material Storage Locations for water quality impacts, and must describe any structural or non-structural improvements made by the Permittee to prevent runoff from discharging into the MS4 or directly into a receiving water.

**Permit Part 3.4.6** requires Permittees with street, road, highway and parking lot responsibilities to document the adequacy of their sweeping activities through a sweeping management plan. Permittees without street maintenance responsibilities do not have an obligation to comply with this provision.

**Permit Part 3.4.7** requires Permittees to review and update their operation and maintenance procedures for other municipal activities, to ensure such procedures protect water quality and reduce the discharge of pollutants through the MS4.

**Permit Part 3.4.8** requires Permittees to ensure that their staff, and others operating in public areas owned or operated by the Permittees, are appropriately handling and/or using pesticides, herbicides, and fertilizers used within the Permit Area. This provision is consistent with the NPDES *General Permit for Discharges from The Application Of Pesticides*.

**Permit Part 3.4.9** requires Permittees to manage onsite materials at their maintenance yards and to prevent pollutants in storm water runoff through use of storm water pollution prevention plans (SWPPPs). Plans developed for such locations can use the basic SWPPP framework identified in various EPA guidance materials, and may follow a "template plan" to establish basic requirements that can be tailored to the location/responsible staff.

**Permit Part 3.4.10** requires Permittees to implement methods to reduce litter within their jurisdiction. This part further allows Permittees to work cooperatively towards the sufficient control of trash and litter within the Permit Area, to prevent the conveyance of material through the MS4.

**Permit Part 3.4.11** requires Permittees to ensure appropriate training for responsible staff such that operation and maintenance activities are conducted properly and with attention to potential water quality impacts.

***EPA requests comment on the breadth, scope and adequacy of the pollution prevention/good housekeeping requirements and activities of MS4GP Part 3.4, in light of the other actions required by the permit.***

### *6. Illicit Discharge Management (MS4GP Part 3.5)*

**Permit Part 3.5** contains requirements for the Permittee to address illicit discharges and spill response within their jurisdiction. At a minimum, EPA requires the regulated small MS4 operator to maintain the ability to prohibit, detect, and eliminate illicit discharges from the MS4.

The purpose of this control measure is to provide ongoing surveillance and deterrence of pollutant loadings caused by illicit discharges into the Permittee's MS4. Illicit discharges can enter a MS4 through direct connections (*e.g*., wastewater piping mistakenly or deliberately connected to the storm drains), or through indirect connections (*e.g.,* infiltration into the MS4 from cracked sanitary systems, spills collected by drain inlets, or discarded paint or used oil dumped directly into a drain). Both types of illicit discharge can contribute excessive pollutants into the MS4, and in turn can negatively affect water quality. Investigating for and eliminating such illicit discharges from entering the MS4 improves water quality.

Permittees are responsible for the quality of the discharges from their MS4, and therefore have an interest in locating and discontinuing any uncontrolled non-storm water discharges into and from their MS4. To ensure that pollutants from non-storm water discharges are adequately controlled, Permittees should work cooperatively with other Permittees to use their collective illicit discharges management and public education activities to address such issues in their jurisdictions.

Previously issued MS4 permits in Idaho contained the four required Illicit Discharge Detection and Elimination (IDDE) program components pursuant to 40 CFR §122.34(b)(3). These components require the MS4 operators to conduct the following activities to manage illicit discharges into the storm drain system:

- Maintain a map of the MS4 showing the location of all outfalls and names of the receiving waters; (as previously discussed, EPA has moved the requirement to maintain a map of the MS4 to MS4GP Part 3.4.2.);

- Effectively prohibit discharges of non-storm water to the MS4 through the use of an ordinance or other regulatory mechanism, and provide for enforcement of that prohibition as needed;

- Develop and implement a program to detect and address non-storm water discharges, including procedures to identify problem areas in the community, determine sources of the problem(s), remove the source if one is identified, and document the actions taken; and

- Inform public employees, businesses, and the general public of the hazards associated with illegal discharges and improper disposal of waste, and publicize appropriate public reporting of illicit discharges when they occur.

Each of the existing Permittees has an established program to prohibit, detect, and respond to illicit discharges, as appropriate to their jurisdiction and overall responsibilities. In the context of the MS4GP, EPA encourages all Permittees to work together to share expertise and knowledge in order to fully implement this control measure within their shared MS4 Permit Coverage Areas.

In Permit Part 3.5, EPA defines specific elements for appropriate illicit discharge management by MS4 operators. The individual program components are described in the following paragraphs:

**Permit Part 3.5.1** establishes a compliance deadline of 180 days from the expiration date for all small MS4 operators to update their existing illicit discharge program activities, and/or to fully impose any new program components. New Permittees may use this compliance date as a target for full implementation within the permit term. EPA believes this timeframe is justified to allow Permittees adequate opportunity to adjust their existing programs, as necessary, and ensure the required actions are sufficiently addressed within the Permit Area. This section also defines the date by which any ACM Request must be submitted

**Permit Part 3.5.2** requires Permittees to effectively prohibit non-storm water discharges into the MS4 through enforcement of an ordinance or other legal mechanism to the extent allowable under Idaho state law. Part 3.5.2 identifies the minimum prohibitions that EPA expects each Permittee to be able to enforce within its jurisdiction, if necessary. EPA has reviewed the local ordinances and regulatory mechanisms currently imposed by existing MS4 Permittees, and EPA generally believes the existing ordinances/mechanisms can fully authorize the specific prohibitions in Part 3.5.2. EPA clarifies that it is unnecessary for the ordinance/legal mechanism to cite the individual prohibitions listed in Permit Part 3.5.2, provided that the Permittee's legal mechanism would or could address such discharges, were they to be found discharging into the MS4. This provision provides a minimum expectation for the local ordinance/legal mechanism to fully prohibit the breadth of possible non-storm water discharges that could negatively impact water quality.

As previously noted, EPA recognizes that certain MS4 operators in Idaho -such as highway districts- may not have the legal authority to enact enforceable ordinances; in such case, the operator may evaluate and cite to any of its existing policies, standard operating procedures, or other legal means in ensuring that any non-storm water discharges will be eliminated when necessary.

**Permit Part 3.5.3** describes EPA's expectations for a Permittee's Complaint Reporting and Response Program. The Permittee must maintain, and advertise, a publicly accessible and available means for the public to report illicit discharges; such reports must be answered within two days, and records regarding actions taken must be maintained.

Existing Permittees must continue, and new Permittees must develop, an illicit discharge complaint reporting and response program that includes community education and detailed response procedures. EPA expects these programs can be promoted to the public in concert with the public education requirements in Permit Part 3.6.

Existing Permittees currently have systems and protocols in place to track calls from citizens, and to direct reports of discharges/dumping to appropriate staff and/or emergency response authorities. Staff assigned to handle calls should be trained in storm water issues and emergency response in order to gather and transfer the right information to responders. Conducting an investigation as soon as possible after the initial complaint report is crucial to the success of this program.

Sources of illicit discharges are often intermittent or mobile, yet the frequency or severity of such discharges can have lasting effects on water quality. The nature, extent, and conclusions of each inspection should be recorded with the original complaint to provide a full picture of each incident. This information provides detailed information about the types and locations of discharges, their possible sources, and other information pertinent to targeting future inspection, outreach, and education activities. Additionally, a complete file documenting an incident can provide better evidence in cases where a citation or civil penalty is needed.

**Part 3.5.4** requires Permittees to conduct dry weather outfall identification and screening to identify non-storm water flows. EPA has added prescriptive requirements for prioritized screening of at least 50 outfalls per year throughout the Permittee's jurisdiction; for using appropriate screening and monitoring protocols when flows are identified during dry weather; and for recordkeeping/documentation. Data collected through the public reporting of illicit discharges and connections, as well as through the Permittee's regular screening of their outfalls during dry weather, can reveal important trends in the types of pollutants generated and transported into the MS4. EPA has included a requirement that the Permittees locate and map the occurrences of illicit discharges. EPA recommends that samples taken during dry weather screening should be sampled for pH, total chlorine, detergents, total copper, total phenols, fecal coliform bacteria, and turbidity.

Appropriate threshold limits for dry weather monitoring results are important to helping distinguish pollutant spikes from normal background conditions at a particular outfall. For example, through its Storm Water Investigation Manual, the Ada County Highway District established threshold levels which, when exceeded, result in retesting to determine whether the sample was an isolated event or an ongoing water quality issue. The

Permittees should also consider establishing a visual baseline for each outfall type, to establish what constitutes "normal" dry weather flows, and to distinguish between background conditions (uncontaminated ground water infiltration, for example) versus abnormal, non-storm water flows that are prohibited by the permit.

**Permit Part 3.5.5** requires mandatory follow-up actions for recurring illicit discharges (identified by complaints or though Permittee screening activities); such response activities must begin within 30 days of identifying elevated concentrations of screening parameters, and action must be taken to eliminate problem discharges within 60 days. Specific timelines are included to direct timely initiation of actions to reduce or fully eliminate a known or newly identified problem.[67]

Due to the diverse nature and sources of water quality impacts in the urban settings in Idaho, both EPA and IDEQ are concerned about inputs of irrigation return flows and/or groundwater seepage through the MS4s. EPA has therefore included in MS4GP Part 3.5.5 a requirement to list any identified MS4 outfall locations where irrigation return flows and/or groundwater seepage are present during dry weather. This is a first, interim step towards an overall assessment of the impact of such non-storm water discharges. For any MS4 outfall where the ongoing dry weather discharges are identified by the Permittee as being associated with irrigation return flows and/or groundwater seepage, the term "appropriate action" in MS4GP Part 3.5.5 means, at a minimum, documentation in the Annual Report of the MS4 outfall location and the Permittee's determination of whether the source of the water either irrigation return flows or groundwater seepage.

If contaminated flows are identified, the MS4GP specifies how the Permittee must record the existence of ongoing problems or issues associated with contaminated groundwater or irrigation related flows. Depending on the watershed, the Permittee must work over the long term to control and eliminate such discharges. In such cases, the Permittee must consider ways to tailor its control measures to address the non-storm water discharges. EPA notes that this may lead the Permittee to submit an Alternative Control Measure request pursuant to MS4GP Part 2.9, and/or consider submitting notification and a long-term Adaptive Management Response as outlined in MS4GP Part 5.

The updated SWMP Document submitted with the Permit Renewal NOI required by Part 8.2 must include the complete listing of all identified MS4 outfall locations with dry weather flows identified by the Permittee as being associated with irrigation return flows

[67] EPA notes that prior individual MS4 permits have specified that a Permittee must investigate any illicit discharge within fifteen (15) days of its detection, and must take action to eliminate the source of the discharge within 45 days of its detection. For example, see Permit #IDS028231. EPA is providing Permittees modest additional flexibility to accommodate the Permittee's procedures leading to mitigation og the illicit discharge.

and/or groundwater seepage. This information will be collectively reassessed by IDEQ, EPA, and the Permittee at the time of the MS4GP renewal to better tailor future control measures during the subsequent permit term to address non-storm water discharges that may be contributing to excessive nutrient loadings in the adjacent receiving waters.

**Permit Part 3.5.6** requires Permittees to respond to spills and maintain all appropriate spill prevention and response capabilities, as appropriate to their jurisdiction and overall responsibilities, through coordination with appropriate entities to provide maximum water quality protection at all times. As responsible owners of infrastructure, MS4 Permittees are expected to have adequate spill response procedures (see above); such response procedures likely must include coordination with other local or state organizations whose responsibilities also include spill response. When EPA says "agencies" in this MS4GP provision, it is referring to these other responsible organizations.

**Permit Part 3.5.7** requires coordination with appropriate agencies to ensure the proper disposal of used oil and toxic materials by employees and the public. Through the education and outreach provisions in MS4GP 3.6, Permittees should consider a community outreach and public education effort to encourage recycling and proper disposal of used oil and household hazardous waste within its jurisdiction.

**Permit Part 3.5.8** requires the Permittee to train appropriate municipal and state staff to respond to spills, complaints, and illicit discharges/connections to the MS4. Municipal staff can be the “eyes and ears” of the storm water program if they are trained to identify illicit discharges and spills or evidence of illegal dumping.

***EPA requests comment on the breadth, scope and adequacy of the illicit discharge detection and elimination activities in MS4GP Part 3.5, in light of the other actions required by the permit.***

### *7. Education, Outreach and Public Involvement (MS4GP Part 3.6)*

**Permit Part 3.6** addresses the education, outreach, and public involvement requirements consistent 40 CFR §§122.34(b)(1) and (b)(2).

Previously issued small MS4 permits in Idaho contain these basic requirements, and all of the existing small MS4 Permittees conduct a wide range of successful and creative public education and public involvement efforts related to storm water management.

Within different areas, individual permittees with public education resources and expertise have taken the lead on the SWMP public education and outreach, often through shared working arrangements on behalf of their fellow Permittees. EPA strongly encourages such cooperative outreach efforts to continue, and intends for the terms and conditions of the

MS4GP to inspire additional cross-area, intrastate, and/or interstate outreach and education efforts to reach constituents within each MS4 Permit Area.

When scoping their intended activities for the term of the MS4GP, EPA also recommends that MS4 Permittees consider the recommendations found in the EPA document, *Promising Practices for Permit Applicants Seeking EPA-Issued Permits: Ways to Engage Neighboring Communities*. See Section V.A of this Fact Sheet.

The MS4GP contains the following Education, Outreach and Public Involvement program components:

**Permit Part 3.6.1** establishes a compliance deadline of one year from the permit effective date for Permittees to begin, or update and continue, their existing public education, outreach, and public involvement program, and/or to impose new program components, within the Permit Area. EPA believes this timeframe is justified to allow Permittees to adjust the existing programs as necessary within the Permit Area. This section also defines the date by which any ACM Request must be submitted.

**Permit Part 3.6.2** specifies requirements for the Education, Outreach and Public Involvement Program. To the extent allowable pursuant to the respective authority granted the individual Permittee under Idaho law, the Permittee must work to educate and engage interested stakeholders in the development and implementation of the SWMP control measures.

**Permit Part 3.6.3** requires the Permittee to distribute and/or offer a minimum of eight educational messages to at least one of the four audiences listed in Part 3.6.4, during the term of the Permit.

**Permit Part 3.6.4** identifies the target audiences (i.e., General Public; Business/Industrial/Commercial/Institutions; Construction/Development Professionals; and Elected Officials, Land Use Policy and Planning Staff). For each audience, the permit includes a non-exclusive list of suggested educational topics for the Permittee to consider as its focus during the Permit term.

**Permit Part 3.6.5** requires Permittees to assess, or to participate in an effort to assess, the understanding and adoption of behaviors by the target audience(s). A vital, yet challenging, component of successful education programs is the assessment of whether the Permittee's efforts are achieving the goals of increasing public awareness and behavior change to improve water quality. EPA recognizes and encourages the long term nature of such assessment activities, and notes that there are opportunities for Permittees to work together or with other organizations on specific topics if they choose to do so.

**Permit Part 3.6.6** requires Permittees to maintain records of their education, outreach, and public involvement activities.

**Permit Part 3.6.7** requires Permittees to provide educational opportunities related to certain SWMP control measures at least twice during the permit term. Permittees should plan opportunities in a manner that the relative success of their educational efforts can be articulated as required by MS4GP Part 3.6.5.

**Permit Part 3.6.8** requires Permittees to maintain and promote at least one publicly-accessible website to provide relevant SWMP information to the public. Relevant SWMP information includes the Permittee's SWMP Document, links to relevant public education material, and easily identifiable (and up to date) Permittee contact information such that members of the public may easily call or email to report spills or illicit discharges, and/or ask questions, etc.

***EPA requests comment on the breadth, scope and adequacy of the public education and public involvement activities in MS4GP Part 3.6, in light of the other actions required by the permit.***

## F. Discussion of the MS4GP's Special Conditions for MS4 Discharges to Impaired Waters (*MS4GP Part 4*)

Special Conditions in MS4GP Part 4 refer to additional water quality based requirements for specific MS4 discharges into impaired waters. See 40 CFR § 122.34(c). MS4GP Part 4 describes who must comply with these special conditions and sets forth general requirements for these Permittees. The specific watershed requirements are set forth in MS4GP Appendix F. Appendix F is organized by UA and impaired receiving water body (See MS4GP Appendix F1 through F6).

Because NPDES permit conditions must also meet the applicable water quality requirements of affected States other than the State in which the discharge originates, MS4GP Appendix F also includes provisions that address impairments in waters that cross the Idaho/Washington State border applicable to regulated small MS4 discharges in the Coeur d'Alene and Lewiston UAs, and from inside the City of Moscow boundary.[68]

> **Permit Part 4.1** defines how these special conditions apply. The phrase, *Affected Permittee,* means: 1) any MS4 Permittee that must uniquely comply with specific requirements based on their MS4 discharges into a water with an applicable TMDL; and/or 2) any MS4 Permittee required to comply with additional requirements to reduce or eliminate pollutants of concern in their MS4 discharges to an impaired receiving water of Idaho or Washington.
>
> An *Applicable TMDL* is any TMDL analysis that EPA has approved on or before the issuance date of the MS4GP, and that contains WLAs and/or LAs for the management of urban storm water discharges from regulated small MS4s. An *impaired water* means any water body that does not meet applicable water quality standards for one or more beneficial uses by one or more pollutants, and that IDEQ includes in its 2014 Integrated Report, Appendix J, as a "Category 5" Water of the state where a TMDL is necessary. The phrase *pollutant of concern* means the parameter for which the waterbody does not meet the Idaho water quality standard. [69]
>
> **Permit Part 4.2** outlines the general requirements for Affected Permittees, and allows MS4 Permittees to demonstrate compliance with their individual requirements of Appendix F through collaborative, joint, or shared efforts. Permittees are encouraged to work together across watersheds and across organizations regardless of political boundaries in order to accomplish meaningful (and successful) monitoring/assessment

[68] See prior discussion in Sections II.B and II.D; 40 CFR 122.44(d).

[69] These terms also refer to relevant municipal storm water management expectations for certain receiving waters considered impaired by the State of Washington downstream of the Idaho/WA border.

and pollutant reduction actions. To maintain public engagement and understanding of the Permittee's actions, MS4GP Part 4.2.2 requires the Affected Permittee(s) to include a description of their TMDL- or impaired water-related activities in their initial SWMP Document, to be completed no later than the due date of the 1st Year Annual Report.

EPA's use of the Two-Step General Permit process outlined in 40 CFR 122.28(d)(2) provides the maximum flexibility for MS4 Permittees to define what and how they will address impairment pollutants, and provides information and transparency to the interested public. MS4 Permittees have the flexibility to select appropriate SWMP activities relevant to their watershed goals and the goals of the watershed advisory groups in their areas.

The deadline for submitting Amended NOIs and ACM requests (as detailed elsewhere in this Fact Sheet) is intended to provide the time for EPA to review each Affected Permittee's submitted documents, propose incorporating any relevant permit terms and conditions in MS4GP Appendix F. EPA expects to complete all Amended NOIs and ACM requests within one year after the effective date of the permit.[70]

With regard to reducing pollutants of concern, MS4GP Part 4 and Appendix F directs Affected Permittees to monitor and/or assess for one or more pollutants of concern. In many watersheds, Affected Permittees must also select and implement two (2) Pollutant Reduction Activities to conduct during the term of the MS4GP that will serve to reduce the relevant pollutants of concern in their MS4 discharges. Specific requirements are listed by Permittee, in MS4GP Appendix F. Such expectations are commonly included in regulated small MS4 permits across the country.[71]

Upon the MS4 Permittee's submittal of its written description of its monitoring/assessment plan, and/or selected pollutant reduction activities, EPA will review to determine consistency with the MS4 permit standard, and will propose terms and conditions in MS4GPAppendix F as necessary to incorporate explicit reference to the Permittee's selected activities.

Appendices 6 and 7 of this Fact Sheet describe, in detail, EPA's rationale for the specific water-quality based requirements set forth in Appendix F of the MS4GP. EPA reviewed and considered each relevant TMDL analysis report and implementation plan (if available), to understand the appropriate and necessary storm water management expectations for Affected Permittees according to the TMDL. EPA also considered any other available water quality information about the pollutants of concern and MS4 discharges to impaired waters.

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[70] Affected Permittees may submit their Amended NOIs/ACM requests at any time after the MS4GP effective date and before the 180-day deadline established by MS4GP Part 2.9.

[71] EPA 2017.

Where EPA determines that a Permittee's implementation of the SWMP control measures in MS4GP Part 3 is adequate to reduce the pollutant(s) of concern and/or are fully consistent with the assumptions of a relevant TMDL, EPA clarifies here that the Affected Permittee and that relevant TMDL are not listed in MS4GP Appendix F, because compliance with MS4GP Part 3 constitutes compliance with that specific TMDL.

**Permit Part 4.2.2** requires Affected Permittee(s) to include a description of their selected TMDL or impaired water-related requirements in their SWMP Document no later than the due date of the 1st Year Annual Report. Beginning with the 2nd Year Annual Report, these Permittees must report on their progress towards meeting those requirements in each Annual Report. The Annual Report format EPA recommends Permittees use will prompt each Permittee for such information. Finally, as part of the Permit Renewal Application/NOI, Affected Permittees must submit Final Report(s) to document their progress to date in accomplishing their intended monitoring/assessment and pollutant-specific reduction activities.

EPA clarifies that the Permittee may conduct monitoring/assessment and pollutant reduction activities that are independent of the SWMP control measures or individual components; or, the Permittee may conduct such actions to augment and enhance the implementation of existing SWMP control measure activities. Acceptable activities must be directly linked to the goal of reducing the pollutants of concern into the impaired receiving water(s), and must be designed to adequately reflect the relative success or failure of such actions over time. Permittees must document their reasons for selecting their activities in the Amended NOI – ACM Request as required by MS4GP Part 2.9.

***EPA requests public comment on the breadth, scope and adequacy of the provisions specified in MS4GP Part 4, in light of the other aspects of the MS4GP.***

## G. Discussion of the MS4GP's Required Response to Excursions of Idaho Water Quality Standards *(MS4GP Part 5*)

MS4GP Part 5 sets forth the requirements for Permittees to report and address excursions above the Idaho WQS as directed by MS4GP Part 2.2.[72] EPA has outlined a corrective action requirement when Permittees find that there have been excursions above Idaho WQS.

MS4GP Part 5 provides MS4 Permittees with opportunity to scope corrective action and adaptive management as needed to address ongoing or prolific sources of pollutants. Where

[72] See also Section III.D.2 of this Fact Sheet

long term and/or ongoing structural solutions must be installed or implemented, MS4GP Part 5 provides opportunity for the Permittee to develop long range implementation and financial planning. EPA supports robust long-term storm water management by communities. Long-term storm water planning focuses on using multi-benefit approaches to solve storm water pollution control challenges. It recognizes that for a plan to be more affordable, communities need to make financial investments over a time horizon of sufficient length to allow for cost efficiencies through working with other municipal programs.[73]

Any MS4 Permittee that submits information pursuant to MS4GP Part 5 will be prompted to report on their incremental progress towards identified milestones in both the Annual Report, and as part of a complete Permit Renewal Application/NOI.

***EPA requests comment on the breadth, scope and adequacy of the requirement specified in MS4GP Part 5, in light of the other actions required by the permit.***

## H. Monitoring, Recordkeeping, and Reporting Requirements (*MS4GP Part 6*)

### *1. Basis*

All MS4 Permittees must evaluate and assess program compliance, keep records, and submit reports. See 40 CFR §122.34(d). Section 308 of the CWA and federal regulation 40 CFR §122.44(i) and subsequent EPA guidance requires monitoring to determine compliance with terms and conditions of a NPDES permit.

Permittees must determine how well their SWMPs are functioning by quantifying their storm water pollutant reductions to protect receiving water quality. Monitoring to evaluate the effectiveness of storm water management actions is necessary and important. Regulated communities in Idaho and elsewhere are finding themselves in need of information to meet defined pollutant reduction goals or to justify budgets that support storm water programs. Monitoring can be used to determine progress towards implementation for many of the other MS4 requirements. Establishing interim and measureable program goals is needed to track progress towards implementing each of the six minimum management measures. Most communities' measureable goals are output based (e.g. number of storm water treatment practices installed, number of educational brochures distributed), which is useful from a program accounting standpoint but does not allow changes in water quality as a result of these activities to be quantified.[74]

[73] EPA 2014a; EPA 2016g.

[74] CWP 2009.

### *2. Monitoring in Prior MS4 Permits in Idaho*

Beginning in 2006, EPA required most of the regulated small MS4 operators discharging to impaired waters to conduct grab samples of MS4 discharges at selected outfalls to fulfill three monitoring objectives, namely: 1) to estimate the pollutant loading (or pollutant loading reductions) discharged from the MS4s; 2) to assess the effectiveness and adequacy of control measures implemented through the applicable MS4 permit; and 3) to identify and prioritize those portions of the MS4 requiring additional controls. EPA required different monitoring parameters for many, but not all, of the regulated Idaho MS4s, and based on discussions with Permittees and IDEQ about the relevant receiving water impairment and relevant TMDL status. Based on an area's rainfall patterns, EPA specified the required number of grab samples per year (which varied between 1-6 samples.)

Table 4 below summarizes the variety of pollutant parameters and collection methods that EPA previously required in prior small MS4 permits in Idaho. Through the collection of discharge monitoring data, EPA attempted to rectify the fundamental absence of data representing MS4 discharge quality in support of IDEQ's TMDL development or TMDL refinement, and to help address ongoing water quality impairments. Existing MS4 Permittees responsible for discharge monitoring have each provided feedback to EPA regarding the relative value of these past data collection efforts.

During the development of the MS4GP, EPA considered different options for how MS4 Permittees might measure and assess compliance with the MS4GP requirements in the future, given the difficulty and overall expense associated with MS4 discharge monitoring. Options included:

- Require existing MS4 Permittees to continue storm water discharge monitoring in the same manner as is currently conducted and directed by the prior Phase II MS4 permits.
    - Under this option, EPA would incorporate into the MS4GP text the specific citations to the existing storm water discharge monitoring plans as currently conducted in each UA.
- Allow new MS4 Permittees, and existing MS4 Permittees at their option, to propose their own unique methods of collecting relevant data to support the assessment of their storm water management activities.
    - This option would require Permittees within the watershed to establish specific metrics to measure storm water quality improvements over time. This option provides maximum flexibility for the MS4 Permittee, and IDEQ, to establish appropriate assessment methods necessary for the individual receiving waterbody.
- Eliminate MS4 outfall sampling requirements for regulated small MS4s discharging into impaired waters, and require quantitative programmatic assessments of SWMP implementation to be conducted by the Permittee or group of permittees. This option

increases the focus on the effectiveness of the Permittee's on-the-ground control measure implementation, yet provides little direct information about receiving water quality or the relative pollutant contribution from MS4 outfalls in each UA.

EPA requires the continued collection of storm water discharge monitoring data in each MS4 Permit Coverage Area to provide information by which to judge the relative success of SWMP control measures, and assess whether MS4 discharges cause or contribute to violations of Idaho WQS.

**Table 4:** ***Parameters Used to Characterize Storm Water Discharge Quality in Idaho Phase II MS4 Areas***

| Parameter | MS4 Discharge Monitoring via Grab Sample by one or more Phase II MS4 Permittee(s) – in the Receiving Waters Indicated |
|---|---|
| Ammonia | Portneuf River, Pocatello Creek |
| *E. coli* | Portneuf River, Pocatello Creek, Lower Boise River, Indian Creek, Mason Creek, Wilson Drain, Willow Drain |
| Flow/Discharge, Volume, in cubic feet | Lake Coeur d'Alene, Spokane River, French Gulch, Fernan Creek, Portneuf River, Pocatello Creek, Lower Boise River, Indian Creek, Mason Creek, Wilson Drain, Willow Drain |
| Hardness (as CaCO3) | Lake Coeur d'Alene, Spokane River, French Gulch, Fernan Creek |
| Lead – Total | Lake Coeur d'Alene, Spokane River, French Gulch, Fernan Creek |
| Nitrate + Nitrite | Portneuf River, Pocatello Creek |
| Nitrogen, Total | Lake Coeur d'Alene, Spokane River, French Gulch, Fernan Creek, Portneuf River, Pocatello Creek, Lower Boise River, Indian Creek, Mason Creek, Wilson Drain, Willow Drain |
| Oil and Grease | Portneuf River, Pocatello Creek |
| Phosphorus - Total | Lake Coeur d'Alene, Spokane River, French Gulch, Fernan Creek, Portneuf River, Pocatello Creek, Lower Boise River, Indian Creek, Mason Creek, Wilson Drain, Willow Drain |
| Polychlorinated Biphenyls (PCBs) | Lake Coeur d'Alene, Spokane River, French Gulch, Fernan Creek |
| Temperature | Lake Coeur d'Alene, Spokane River, French Gulch, Fernan Creek |
| Total Suspended Solids (TSS) | Lake Coeur d'Alene; Spokane River; French Gulch; Fernan Creek; Portneuf River; Pocatello Creek; Lower Boise River; Indian Creek; Mason Creek; Wilson Drain; Willow Drain |
| Zinc- Total | Lake Coeur d'Alene; Spokane River; French Gulch; Fernan Creek |

### *3. Discussion of MS4GP's Monitoring/Assessment Activities*

EPA recognizes that the MS4GP should not impose a "one size fits all" monitoring and assessment approach on Permittees. Instead, EPA has included maximum flexibility for the Permittee to decide what makes sense for them and their MS4 discharges. MS4 stakeholders around the country have found that relevant watershed-level questions must drive a MS4 Permittee's monitoring and assessment choices. Because water quality benefits will only be realized over the long-term, it is important for MS4 Permittees to invest their time and energy into long-term implementation mechanisms that are linked to appropriate monitoring and

assessment actions. Monitoring and assessment data contributes to new knowledge, and resulting data should then be made broadly available.[75]

EPA has therefore specified in MS4GP Appendix F that Affected Permittees must develop and implement a monitoring/assessment plan that addresses, at a minimum, the impairment pollutants identified for their specific watershed(s). Such actions must be carried out during the term of the MS4GP.

**MS4GP Part 6** refines what must be contained in any Permittee's monitoring/assessment plan. Within 6 months of the MS4GP effective date, the Affected Permittee must submit their monitoring/assessment plan to EPA; using the 2-step GP approach previously discussed, EPA will then review submittals to propose permit terms in Appendix F that will recognize Permittee-specific actions.

An MS4 Permittee, at their discretion, may choose to submit a plan outlining any number of ways to monitor/assess the successful reductions in pollutant from their MS4. For example, Affected Permittees may continue, and/or begin, to monitor storm water discharges from the existing or newly selected MS4 outfall monitoring locations. Alternatively, they may revise their monitoring/assessment activities to better match their current goals and objectives for successful storm water management. Permittees may choose to conduct biological or macroinvertebrate sampling, or instream monitoring, to reflect certain parameters or watershed outcomes. They may choose to focus on identifying ongoing pollutant sources within sub-sewer shed areas of the MS4. They may choose to focus on human behavior changes, or changes in rates of compliance, resulting from outreach and educational efforts. Permittees may choose to work together, within or across watersheds, or within organizations, to accomplish their intended goals. EPA encourages MS4 Permittees to be cooperatively creative during the MS4GP permit term to defining how they will affirmatively demonstrate reductions in pollutant loading from their MS4 into impaired waters.

### *4. Summary of Monitoring, Recordkeeping and Reporting Requirements (MS4GP Part 6)*

**MS4GP Part 6** is organized by first outlining the fundamental requirements for any monitoring/ assessment activities, particularly if such activities include to storm water discharge monitoring, and/or sampling for polychlorinated biphenyls (PCBs). Quality assurance requirements are also specified for any monitoring and assessment activities conducted under the MS4GP. MS4GP Part 6 also includes recordkeeping and reporting requirements as follows:

[75] Stein 2013; EPA 2016g; NRC 2008.

**MS4GP Part 6.1** requires each Permittee to assess their compliance with the requirements of the MS4GP on an annual basis, and to document such evaluation through the submittal of an Annual Report.

Although federal regulations allow less than annual monitoring for Existing Permittees, EPA has instead provided a concise "fillable PDF" Annual Report format for MS4 Permittees to use annually during the term of the MS4GP. Reporting under the first term of the MS4GP should not occur less than once per year, as the five year permit term will coincide with the national transition to online reporting for MS4 permits, expected to be accomplished no later than December 2020.[76] To maintain continuity during this transition, EPA believes it appropriate to retain annual reporting under the MS4GP for all Permittees, albeit with a simpler fillable format to replace the previously-used narrative report style. Once the NPDES storm water permit program is transferred to IDEQ, MS4 Permittees may then negotiate for different reporting frequencies in the MS4GP pursuant to 40 CFR 122.34.

**MS4GP Part 6.2** outlines the required objectives of the Permittee's monitoring/assessment activities. After EPA adds to Appendix F to reflect the Permittee's activities, such monitoring activities must begin no later than 30 days following EPA's written notice that the GP has been revised, pursuant to Part 2.9.4. Standard NPDES permit conditions are included in Part 6.2 related to representative sampling, additional monitoring, and use of sufficiently sensitive testing methods.

MS4GP Part 6.2.5 summarizes the basic components of any wet weather storm water discharge monitoring, and requests comment on whether EPA should also articulate minimum expectations for surface water quality or biological monitoring in Part 6.2. MS4GP Part 6.2.6 contains the options that Affected Permittees in the Spokane River and Paradise Creek/South Fork Palouse River watersheds may select from to accomplish PCB monitoring/assessment activities in those areas. During the permit term, the MS4GP specifies monitoring/assessment of PCB loading in either storm water discharge or in sediment collected from catch basins, using EPA Methods 1668C and 8082, or in some other fashion as articulated by the MS4 Permittee. Finally, MS4GP Part 6.2.7 of the MS4GP requires Permittees to create, or revise existing, Quality Assurance Project Plans (QAPP) to guide the intended monitoring/assessment activities.

**MS4GP Part 6.3** requires the Permittee to keep all records associated with the MS4GP for a period of at least five years, and submit such records only when requested by EPA. The Permittee's SWMP materials must also be available to the public; MS4 operators

[76] See EPA e-Reporting Rule, October 2015.

may charge a reasonable fee for copies, and may require a member of the public to provide advance notice of their request. As previously described, MS4GP Part 3.6 also requires the Permittee to provide their SWMP materials to the public electronically via a dedicated website.

**MS4GP Part 6.4 and 6.5** describes both the schedules and expected content for the Annual Reports, and the final monitoring/assessment and pollutant reduction activity reports, to be submitted to EPA. At a minimum, Permittees must submit their Annual Report of progress to both EPA and IDEQ using the recommended Annual Report format provided in MS4GP Appendix E no later than 60 days after the relevant reporting period. The Annual Report format is designed to prompt the Permittee for appropriate information according to compliance dates specified in the final MS4GP.

The Permittee must submit signed versions of the required reports to the EPA and IDEQ addresses provided in MS4GP Appendix G, at least until EPA has established the national electronic reporting system for the MS4 Permit program as a whole. In the NPDES Electronic Reporting Rule (published at 80 FR 64064, October 22, 2015), EPA describes how it is working towards having all NPDES reports submitted in compliance with an applicable permit to be submitted electronically no later than December 21, 2020. The MS4 Permit program is one of the last types of NPDES permits to be accommodated by this new system.

***EPA requests public comment on the scope and adequacy of the all aspects of the monitoring and reporting requirements, including the recommended Annual Report format, in light of the other aspects of the MS4GP.***

## I. Standard Permit Conditions

**MS4GP Parts 7 and 8** contain standard regulatory language that must be included in all NPDES permits. The standard regulatory language addresses compliance responsibilities, and other general requirements. Although several provisions may not strictly apply to MS4 facilities (examples include the upset or bypass provisions), it is mandatory that each of the standard provisions be included in an NPDES permit and were previously included in the prior individual MS4 permits. EPA notes that if a particular provision in MS4GP Parts 7 or 8 does not apply to a Permittee's MS4 discharges or facilities, the Permittee does not need to comply with that provision**.**

### *1. Duty to Reapply and Continuation of the Expired General Permit (MS4GP Part 8.2)*

In accordance with 40 CFR §122.46(a), NPDES permits are in effect for a fixed term not to exceed five (5) years. Therefore, the MS4GP will expire five years from the effective date of the final permit. Part 8.2 of the MS4GP requires any MS4 Permittee that intends to continue

its operational control and management of MS4 discharges to submit a NOI of coverage under the next permit term under a new GP, or to submit an individual permit application.

MS4GP Part 8.2.1 describes the expected content of a complete Permit Renewal Application/NOI. The deadline for the Permit Renewal Application/NOI corresponds to the implementation compliance dates established elsewhere in the MS4GP; therefore, as part of their request for continued permit coverage, the MS4 Permittee must submit the required attachments list in Part 8.2.1 to demonstrate how they have complied with the MS4GP.

MS4GP Part 8.2.2 describes the procedure that applies if EPA (or IDEQ) does not reissue the MS4GP prior to its expiration date. If the MS4GP is not reissued or replaced prior to its expiration date, Existing MS4 discharges can be authorized under an administrative continuance, in accordance with the Administrative Procedure Act and 40 CFR §122.6, and the conditions of the MS4GP will remain in force and in effect for such MS4 discharges authorized prior to permit expiration. Following the submittal of a complete Permit Application/Renewal NOI prior to the expiration date of the MS4GP, a Permittee can be covered by the MS4GP under administrative continuance. This administrative continuance will continue until EPA (or IDEQ) provides subsequent authorization under a reissued or replacement Permit. Alternatively, EPA (or IDEQ) may issue or deny an individual permit for the Permittee's discharge; or EPA (or IDEQ) may formally decide not to reissue the MS4GP, at which time the Permittee must seek authorization under an alternative general permit or an individual permit.

All MS4 Permittees are expected to submit a 5$^{th}$ Year Annual Report by the expiration date of the MS4GP using the format provided in Appendix E of the MS4GP. After the permit expiration date, any MS4 Permittee that submits a Renewal NOI in accordance with Part 8.2 and is authorized under an administrative continuance must thereafter submit annual report(s) by the anniversary of the permit expiration date, until coverage under a reissued or replacement Permit is available.

***EPA requests public comment on the content of the NOI Application Renewal, in light of the other aspects of the MS4GP.***

# IV. Other EPA Determinations Related to MS4 Discharges in Idaho

## A. Waivers for Small MS4s in Urbanized Areas

NPDES regulations at 40 CFR §122.32(d) and (e) provide a mechanism for granting waivers from MS4 permit requirements to those entities automatically designated as regulated small MS4s by virtue of their location within a UA.

**A waiver may be available for small MS4s serving a population of less than 1,000 people within a UA,** where the MS4 is not contributing substantially to the pollutant loadings of a physically interconnected regulated small MS4. In addition, if the MS4 discharge includes any pollutant that has been identified as a cause of impairment of any receiving water body, the NPDES permitting authority must determine that storm water controls are not needed based on waste load allocations that are part of an EPA-approved or established TMDL that addresses the pollutant of concern. See also 40 CFR §123.35(d)(1).

**A waiver may be available for small MS4s serving a population of under 10,000 people within a UA,** when storm water controls are not needed based on WLAs that are part of an EPA-approved or established TMDL that address the pollutants of concern. In such cases, the NPDES permitting authority must evaluate all waters of the U.S that receive a discharge from the otherwise regulated small MS4, and must determine that such controls are not needed. Alternatively, if a TMDL has not been developed or approved, the NPDES permitting authority must conduct an equivalent analysis that determines sources and allocations for the pollutant(s) of concern. In this situation, a "pollutant(s) of concern" includes biochemical oxygen demand (BOD), sediment or a parameter that addresses sediment (such as total suspended solids, turbidity, or siltation), pathogens, oil and grease, and any pollutant identified as a cause of impairment of any water body that receives a discharge from the MS4. Further, the NPDES permitting authority must have determined that future discharges from the MS4 do not have the potential to result in exceedances of water quality standards, including impairment of designated uses, or other significant water quality impacts, including habitat and biological impacts. See also 40 CFR §123.35(d)(2).

At a minimum, any waivers granted by the NPDES permitting authority under 40 CFR §123.35(d)(2) must be reevaluated at least every five years to determine if the information required for granting the waiver has changed, and/or in light of any new evidence provided as part of a petition.

EPA previously accepted MS4 permit waiver requests, pursuant to 40 CFR 122.32(d), from the City of Hayden Lake; Fernan Lake Village; and the Idaho National Laboratory. In 2012, EPA also received a MS4 permit waiver request from the Notus-Parma Highway District. In September 2017, EPA received a MS4 permit waiver request from Nampa Highway District.

EPA has evaluated these waiver requests and based on information available as of the date of this Fact Sheet, EPA has determined is appropriate to waive these entities from the MS4 permitting requirements. Materials supporting these EPA decisions are available for review and comment, upon request, as part of the Administrative Record for the MS4GP.

***EPA requests public comment on the decision to waive certain public entities from the MS4 permitting requirements.***

## B. NPDES Permitting Authority Consideration of Petitions under 40 CFR §122.26(f)

A MS4 discharge may be required to obtain NPDES permit coverage as a result of a petition submitted to the NPDES Permitting Authority, as outlined in 40 CFR §122.26(f). Any MS4 operator may petition EPA to require a NPDES permit for any discharge into an MS4. Any person may petition EPA to require a permit for a discharge composed entirely of storm water which contributes to a violation of a water quality standard or is a significant contributor of pollutants to waters of the United States, and/or for the designation of a large-, medium- or small MS4 as defined in 40 CFR §122.26(b).

To date, EPA has not received any formal petitions. If EPA receives a petition to designate a MS4 in the future, EPA proposes to use the Agency-recommended evaluation criteria, available on the EPA Region 10 website, to make any final determination within the timeframes required by the federal regulation.

## C. EPA Designation to Regulate Other MS4s

EPA has authority under the CWA to designate additional storm water discharges, beyond those defined in the NPDES regulations, as needing to obtain a permit when necessary to protect water quality or remedy localized water quality impacts. See 40 CFR §§122.26(a)(1)(v) and (a)(9). In addition, EPA must also evaluate and consider designating certain additional small MS4s as needing permit coverage. In particular, EPA must consider designation when a candidate MS4 is located outside of an urbanized area, and serves a jurisdiction with a population density of 1,000 people per square mile and a population of at least 10,000 people. EPA must also consider whether to designate a candidate MS4 when discharges from the MS4 contribute substantially to the pollutant loadings of a physically interconnected regulated small MS4. See 40 CFR §123.35(b)(3) and (4).

EPA developed criteria to use when evaluating other MS4s for designation. The criteria are very similar to guidance recently developed by IDEQ.[77] When EPA decides to designate a MS4's

[77] See: IDEQ 2016; EPA 2016e; EPA 2016f.

discharges as needing NPDES permit coverage, EPA will provide public notice and an opportunity for the public to comment on the designation decision. Once designated, the MS4 operator would be eligible to apply for coverage under the MS4GP. Alternatively, EPA could instead require the candidate MS4 operator to submit an application for an individual NPDES permit.

EPA proposes to designate discharges from the MS4s owned and/or operated by the following entities as needing NPDES permit coverage; EPA's rationale supporting these decisions are available for public review as part of the Administrative Record for this permit action **{*add external web link to appropriate designation document*}:**

1. City of Moscow, Idaho
2. University of Idaho in Moscow, Idaho

EPA notified the City of Moscow in 2008 of its intention to designate the City as a MS4 needing permit coverage, and in August 2009, City of Moscow submitted its MS4 permit application in response to EPA's request for a MS4 permit application occurring within its jurisdiction. Therefore, EPA determines it appropriate to authorize MS4 discharges from the City of Moscow, as a new Permittee, under the MS4GP.

Upon the date of issuance of the final MS4GP, and a final EPA designation decision, the University of Idaho in Moscow, Idaho, must submit a NOI for coverage under the MS4GP pursuant to the deadlines established by MS4GP Part 1.4. The University of Idaho may submit its NOI or MS4 permit application at any time prior to the final issuance of the MS4GP.

Pursuant to 40 CFR §123.35(b)(3), EPA also evaluated certain other MS4 discharges in Idaho communities located outside of Census-defined UAs, whose population statistics exceed the mandatory thresholds identified above. Specifically, EPA evaluated the communities of Hailey; Mountain Home; Rexburg; Blackfoot; Sandpoint; Twin Falls; Jerome; and Burley, ID. Using the identified criteria, and with the information available to EPA at this time, EPA does not propose to designate any additional MS4 discharges for permitting.

***EPA requests public comment on its decision to designate all MS4 discharges within the combined boundaries of the City of Moscow, Idaho, and the Census defined Moscow, Idaho, urban cluster, as subject to the federal MS4 permit requirements.***

# V. Other Legal Requirements

## A. Environmental Justice

Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, directs each federal agency to "make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high, and adverse human health or environmental effects of its programs, policies, and activities." The EPA strives to enhance the ability of overburdened communities to participate fully and meaningfully in the permitting process for EPA-issued permits, including NPDES permits. "Overburdened" communities can include minority, low-income, tribal, and indigenous populations, or communities that potentially experience disproportionate environmental harms and risks. As part of an agency-wide effort, the EPA Region 10 will prioritize enhanced public involvement opportunities for EPA-issued permits that may involve activities with significant public health or environmental impacts on already overburdened communities. For more information, please visit http://www.epa.gov/compliance/ej/plan-ej/ .

As part of the permit development process, EPA Region 10 conducted a screening analysis to determine whether this permit action could affect overburdened communities. EPA uses a nationally consistent geospatial tool that contains demographic and environmental data for the United States at the Census block group level. This tool is used to identify permits for which enhanced outreach may be warranted.

Based on this screening, the Nampa/Caldwell, Moscow, and Pocatello/Chubbuck have been selected as areas where potentially overburdened communities reside. In order to ensure that individuals in these MS4 areas are able to participate meaningfully in the permit process, EPA is conducting the enhanced outreach activities to ensure that interested stakeholders in these areas, and throughout the state, will be informed and able to provide their input on appropriate storm water management activities.

Regardless of whether a regulated small MS4 discharge is located near a potentially overburdened community, EPA encourages all MS4 Permittees to review (and to consider adopting, where appropriate) Promising Practices for Permit Applicants Seeking EPA-Issued Permits: Ways To Engage Neighboring Communities as described in the EPA document available at https://www.federalregister.gov/articles/2013/05/09/2013-10945/epa-activities-to-promote-environmental-justice-in-the-permit-application-process#p-104.

## B. Endangered Species Act

The Endangered Species Act (ESA) requires federal agencies to consult with the National Oceanic and Atmospheric Administration – National Marine Fisheries Service (NOAA Fisheries) and the U.S. Fish and Wildlife Service (USFWS) regarding potential effects an action may have on listed endangered species.

As of the date of this Fact Sheet, EPA is evaluating the potential effects of the MS4GP, as proposed, through development of a Biological Evaluation (BE). The BE will determine whether issuance of the MS4GP is likely to adversely affect any threatened or endangered species. EPA began preliminary consultation discussions with NOAA-Fisheries and USFWS in 2017, and will complete consultation as required by the ESA prior to the final issuance of the MS4GP.

## C. Essential Fish Habitat

Essential fish habitat (EFH) is the waters and substrate (sediments, etc.) necessary for fish spawning, breeding, feeding, or growing to maturity. The Magnuson-Stevens Fishery Conservation and Management Act requires EPA to consult with the NOAA-Fisheries if a proposed action has the potential to adversely affect (by reducing the quality and/or quantity of) EFH. EPA is currently evaluating the impacts of EPA's issuance of this permit and will complete EFH consultation if necessary in the near future.

The EFH regulations define an adverse effect as any impact which reduces quality and/or quantity of EFH and may include direct (e.g. contamination or physical disruption), indirect (e.g. loss of prey, reduction in species' fecundity), site specific, or habitat-wide impacts, including individual, cumulative, or synergistic consequences of actions. The EPA has prepared an EFH assessment as part of the BE described above.

Because of the location of the municipal storm water discharges to be authorized under the MS4GP in the Idaho Falls, Pocatello, Boise, Nampa-Caldwell, Moscow, and Coeur d'Alene areas, EPA has determined that the issuance of the permit will not affect any EFH species in the vicinity of these discharges, therefore consultation regarding regulated small MS4 discharges in these areas is not required for this action.

EPA tentatively determined that issuance of the MS4GP is not likely to adversely affect EFH near the regulated small MS4 discharges originating from the Lewiston Urbanized Area. The EPA provides NOAA Fisheries with copies of the permit and fact sheet during the public notice period. EPA will consider any comments received from NOAA Fisheries regarding EFH prior to the issuance of the MS4GP.

## D. National Historic Preservation Act

Section 106 of the National Historic Preservation Act (NHPA) requires federal agencies to take into account the effects of federal undertakings on historic properties listed on, or eligible for listing on, the National Register of Historic Places. The term federal "undertaking" in NHPA regulations to include a project, activity, or program of a federal agency that can result on changes in the character or use of historic properties, if nay historic properties are located in the area of potential effects for that project, activity or program. See 36 CFR §802(o). Historic Properties include prehistoric or historic districts, sites, buildings, structures, or

objects that are included in, or are eligible for inclusion in, the National Register of Historic Places. See 36 CFR §802(e).

Federal undertakings include the EPA's issuance of a general NPDES permit. To ensure compliance with the NHPA, the MS4GP authorizes storm water discharges only under the following circumstances:

1. The MS4 storm water discharges, and discharge related activities by the Permittee, do not affect a property listed or that has been reviewed and determined eligible for listing on the National Register of Historic Places; or
2. The MS4 operator complies with a written agreement with the State Historic Preservation Officer (SHPO) or Tribal Historic Preservation Officer (THPO) that outlines all measures that will be undertaken to mitigate or prevent adverse effects to historic properties.

These requirements are implemented via the standard provision in MS4GP Part 8.10, as well as the eligibility requirements in MS4GP Part 1.3.2 and Permit Appendix D, in a manner to restrict permit coverage eligibility for new MS4 applicants to only those storm water discharges and discharge related activities that meet either of the above criteria. Similar criteria is used by the EPA Region 1 (Northeastern U.S.) and EPA Region 6 (Southwestern U.S) in their respective MS4 general permits, and Region 10 has developed similar conditions for new MS4 applicants in Idaho. Appendix D of the MS4GP contains additional direction to new permit applicants that submit NOIs requesting MS4GP coverage after the effective date.

EPA previously addressed NHPA conditions in prior individual MS4 permits issued in Idaho. With regard to the Existing and New regulated small MS4 operators listed in Permit Appendix A, the reduction of pollutants in runoff from these MS4s will not result in the disturbance of any site listed or eligible for listing in the National Historic Register. EPA determines that actions of Existing and New regulated small MS4s listed in Permit Appendix A, in accordance with the MS4GP, will substantively comply with the terms and conditions of the National Historic Preservation Act. Therefore, EPA finds that the all MS4 operators listed in Appendix A are eligible for coverage under the MS4GP without further documentation. EPA reminds all MS4 Permittees that, pursuant to MS4GP 8.10, they must comply with applicable state, Tribal and local laws concerning protection of historic properties.

EPA provided a copy of the MS4GP permit proposal package to the Idaho State Historic Preservation Office.

## E. National Environmental Policy Act (NEPA) and Other Federal Requirements

Regulations at 40 CFR §122.49, list the federal laws that may apply to the issuance of permits i.e., ESA, National Historic Preservation Act, the Coastal Zone Act Reauthorization Amendments (CZARA), NEPA, and Executive Orders, among others. The NEPA compliance program requires analysis of information regarding potential impacts, development, and analysis of options to avoid or minimize impacts; and development and analysis of measures to mitigate adverse impacts.

Because regulated small MS4s do not have any EPA-promulgated effluent limitation guidelines or new source performance standards, specific to their discharges, EPA has determined that no Environmental Assessments or Environmental Impact Statements are required under NEPA.

Idaho is not located in the U.S. coastal zone, so CZARA does not apply. In addition, the MS4GP will not authorize the construction of any water resources facility or the impoundment of any water body. No regulated small MS4s are located in areas with Wild and Scenic River designations. Therefore, EPA has determined that the Fish and Wildlife Coordination Act, 16 USC § 661 et seq., and the Wild and Scenic Rivers Act, 16 USC § 470 et seq., do not apply to the issuance of the MS4GP.

## F. State Certification

Section 401 of the CWA, 33 USC 1341, requires the EPA to seek a certification from the State of Idaho that the conditions of the MS4GP are stringent enough to comply with Idaho WQS, including the state anti-degradation policy, before issuing the final permit. Federal regulations at 40 CFR §124.53 allow for the state to stipulate more stringent conditions in the permit, if the certification sites the CWA or state law upon which that condition is based.

A certification must include statements of the extent to which each condition of the permit can be less stringent without violating the requirements of state law. EPA requested that IDEQ review the Preliminary Draft MS4GP and provide a draft certification pursuant to 40 CFR §124.53. See Appendix 1 of this Fact Sheet.

After the comment period, EPA will evaluate and addresses all public comments, and thereafter EPA will send a proposed final MS4GP to the State for final certification. If the State authorizes different or additional conditions as part of the certification, EPA may change the permit to reflect these conditions.

## G. Permit Expiration

The MS4GP will expire five years from the effective date.

### H. Presidential Oversight of Federal Regulations [Executive Order 12866]

The White House Office of Management and Budget (OMB) has exempted NPDES permit actions from the review requirements of Executive Order 12866 providing for presidential oversight of the regulatory process pursuant to Section 6 of that order. EPA has determined that a NPDES general permit is not a "significant regulatory action" under the terms of Executive Order 12866 and is therefore not subject to OMB review.

### I. Economic Impact [Executive Order 12291]

EPA has reviewed the effect of Executive Order 12291 relative to the MS4GP, and has determined that it is not a major rule under that order.

### J. Paperwork Reduction Act [44 USC § 3501 et seq.]

EPA has reviewed the requirements imposed on regulated small MS4 entities in the MS4GP under the provisions of the Paperwork Reduction Act, 44 USC 3501 et seq. OMB previously approved the information collection requirements in submissions the Agency made for the NPDES permit program, and assigned OMB control numbers 2040-0086 and 2040-0110.

## VI. References

The following is a partial list of references supporting the development of the Idaho MS4GP; additional references are available in the Administrative Record for this permit action.

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See: *cgp_small_residential_lot_swppp_template_final_draft_11-30-15_0.docx*

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# Appendix 1: Correspondence from IDEQ Regarding CWA §401 Certification

# Appendix 2: Urbanized Area Maps

All U.S. Urbanized Area maps are available: http://www2.census.gov/geo/maps/dc10map/UAUC_RefMap/ua/.

| **Maps of Urbanized Areas in the State of Idaho, as defined by the U.S. Bureau of Census** | | |
|---|---|---|
| Coeur d'Alene | Census 2000 | http://www2.census.gov/geo/maps/urbanarea/uaoutline/UA2000/ua18451/ua18451_01.pdf |
| | Census 2010 | http://www2.census.gov/geo/maps/dc10map/UAUC_RefMap/ua/ua18451_coeur_dalene_id/ |
| | | |
| Lewiston | Census 2000 | http://www2.census.gov/geo/maps/urbanarea/uaoutline/UA2000/ua49312/ |
| | Census 2010 | http://www2.census.gov/geo/maps/dc10map/UAUC_RefMap/ua/ua49312_lewiston_id--wa/ |
| | | |
| Nampa | Census 2000 | http://www2.census.gov/geo/maps/urbanarea/uaoutline/UA2000/ua60976/ |
| | Census 2010 | http://www2.census.gov/geo/maps/dc10map/UAUC_RefMap/ua/ua60976_nampa_id/ |
| | | |
| Boise | Census 2000 | http://www2.census.gov/geo/maps/urbanarea/uaoutline/UA2000/ua08785/ |
| | Census 2010 | http://www2.census.gov/geo/maps/dc10map/UAUC_RefMap/ua/ua08785_boise_city_id/ |
| | | |
| Pocatello | Census 2000 | http://www2.census.gov/geo/maps/urbanarea/uaoutline/UA2000/ua70426/ua70426_01.pdf |
| | Census 2010 | http://www2.census.gov/geo/maps/dc10map/UAUC_RefMap/ua/ua70426_pocatello_id/ |
| | | |
| Idaho Falls | Census 2000 | http://www2.census.gov/geo/maps/urbanarea/uaoutline/UA2000/ua40996/ua40996_01.pdf |
| | Census 2010 | http://www2.census.gov/geo/maps/dc10map/UAUC_RefMap/ua/ua40996_idaho_falls_id/ |
| **Maps of Idaho Jurisdictions/Areas Designated by EPA as Needing MS4 Permit Coverage** | | |
| Moscow | Urban Cluster Census 2010 | http://www2.census.gov/geo/maps/dc10map/GUBlock/st16_id/place/p1654550_moscow/ |

# Appendix 3: Small Regulated Small MS4s Discharges to be Authorized under the MS4GP

This Appendix lists entities EPA intends to cover under the MS4GP. Further information is available as part of the Administrative Record. Upon the permit effective date; EPA Region 10 will send each MS4 operator written authorization to discharge under the final MS4GP.
See Appendix 2 for links to maps of the Urbanized Areas associated with Coeur d'Alene, Lewiston (ID)-Clarkston (WA), Nampa, Boise, Pocatello and Idaho Falls UAs.

**Appendix 3 - Regulated Small MS4s Discharges to be Authorized under the MS4GP**

| Previous NPDES Permit # | Operator Name | Census Defined Urbanized Area | Existing or New MS4 Permittee | Impaired Water/ TMDL/ESA ? | Date of MS4 Application/ Renewal Application/ NOI Submittal | Receiving Waters |
|---|---|---|---|---|---|---|
| **Lower Boise River Watershed** | | | | | | |
| IDS-028185 | Ada County Highway District | Boise UA | Existing MS4 Permittee | Yes | Yes-1-15-2014 | Boise River |
| IDS-028177 | Idaho Trans. Department District #3 | Boise UA and Nampa UA | Existing MS4 Permittee | Yes | Yes-10-9-2014 | Boise River |
| IDS-028100 | City of Middleton | Nampa UA | Existing MS4 Permittee | Yes | Yes –6-19-2014 | Boise River & tributaries; Mill Slough |
| IDS-028126 | City of Nampa | Nampa UA | Existing MS4 Permittee | Yes | Yes- 7-7-2014 | Mill Slough, Willow, Indian & Mason Creeks, Boise River |
| IDS-028142 | Nampa Highway District #1 | Nampa UA | Existing MS4 Permittee | Yes | Yes- 4-23-2014 | North Robinson Lateral; 12th Avenue Drain, Duval Lateral; Elijah & Moses Drains, Indian, Mason, & Wilson Creeks |
| IDS-028118 | City of Caldwell | Nampa UA | Existing MS4 Permittee | Yes | Yes- 6-30-2014 | Indian Creek, Mason Creek, Boise River via tributaries |

## Appendix 3 - Regulated Small MS4s Discharges to be Authorized under the MS4GP

| Previous NPDES Permit # | Operator Name | Census Defined Urbanized Area | Existing or New MS4 Permittee | Impaired Water/ TMDL/ESA ? | Date of MS4 Application/ Renewal Application/ NOI Submittal | Receiving Waters |
|---|---|---|---|---|---|---|
| IDS-028134 | Canyon Highway District #4 | Nampa UA | Existing MS4 Permittee | Yes | Yes-6-18-2014 | Boise River |
| **Spokane River-Lake Coeur d'Alene** | | | | | | |
| IDS-028193 | Post Falls Highway District | Coeur d'Alene UA | Existing MS4 Permittee | Yes | Yes – 6-26-2013 | Spokane River, Spring Creek |
| IDS-028231 | City of Post Falls | Coeur d'Alene UA | Existing MS4 Permittee | Yes | Yes- dated 6-4-2013 | Spokane River |
| IDS-028207 | Lakes Highway District | Coeur d'Alene UA | Existing MS4 Permittee | Yes | Yes- 6-26-2013 | Hayden Lake, Lake Coeur d'Alene |
| IDS-028215 | City of Coeur d'Alene | Coeur d'Alene UA | Existing MS4 Permittee | Yes | Yes -5-13-2013 | Spokane River, Lake Coeur d'Alene |
| IDS-028223 | Idaho Trans. Department District #1 | Coeur d'Alene UA | Existing MS4 Permittee | Yes | Yes -6-27-2013 | Spokane River, Fernan Gulch |
| New Applicant + | Eastside Highway District | Coeur d'Alene UA | New MS4 Permittee | Yes | Yes – 6-26-13 | Lake Coeur d'Alene, Fernan Lake |
| **Portneuf River** | | | | | | |
| IDS-028053 | Bannock County | Pocatello UA | Existing MS4 Permittee | Yes | Yes *Date of Yr 4 Annual Report* | Portneuf River |
| IDS028053 | City of Chubbuck | Pocatello UA | Existing MS4 Permittee | Yes | *Yes* | Portneuf River |
| New Applicant | Idaho State University | Pocatello UA | New MS4 Permittee | Yes | *Yes* | Portneuf River |
| IDS-028053 | City of Pocatello | Pocatello UA | Existing MS4 Permittee | Yes | *Yes* | Portneuf River; Pocatello Creek |

## Appendix 3 - Regulated Small MS4s Discharges to be Authorized under the MS4GP

| Previous NPDES Permit # | Operator Name | Census Defined Urbanized Area | Existing or New MS4 Permittee | Impaired Water/ TMDL/ESA ? | Date of MS4 Application/ Renewal Application/ NOI Submittal | Receiving Waters |
|---|---|---|---|---|---|---|
| IDS-028053 | Idaho Trans. Department District #5 | Pocatello UA | Existing MS4 Permittee | Yes | *Yes* | Portneuf River |
| **Snake-Clearwater** | | | | | | |
| IDS-028061 | City of Lewiston | Lewiston UA | New MS4 Permittee | Yes | Yes | Tammany & Lindsay Creeks, Lower Granite Dam Pool |
| New Applicant | Lewis-Clark State College | Lewiston UA | New MS4 Permittee | Yes | 1-18-2011 | Lower Granite Dam Pool |
| IDS-028258 | Idaho Trans. Department District #2 | Lewiston UA | New MS4 Permittee | Yes | Yes | Lower Granite Dam Pool |
| **Snake River** | | | | | | |
| IDS-028070 | City of Idaho Falls | Idaho Falls UA | Existing MS4 Permittee | No | Yes | Snake River & tributaries |
| IDS-028070 | Idaho Trans. Department District #6 | Idaho Falls UA | Existing MS4 Permittee | No | Yes | |
| **Palouse River** | | | | | | |
| New Applicant | City of Moscow | None | New MS4 Permittee | Yes | Yes | Paradise Creek, South Fork Palouse River |

# Appendix 4: Designated Beneficial Uses for Waters Receiving Regulated MS4 Discharges

| ***Appendix 4- Designated Beneficial Uses for Waters Receiving Regulated MS4 Discharges*** | | | |
|---|---|---|---|
| **Urbanized Area or City** | **Receiving Water** | **Citation from IDAPA or WAC** | **Designated Beneficial Uses** *(Note: All waters in Idaho must also be protected for industrial and agricultural water supply, wildlife habitats, and aesthetics*) |
| ***PANHANDLE BASIN*** | | | |
| Coeur d'Alene Urbanized Area | Fernan Lake | 58.01.02.110.10 | Cold water aquatic life, salmonid spawning, primary contact recreation, domestic water supply. |
| | Coeur d'Alene Lake | 58.01.02.110.10 | Cold water aquatic life, salmonid spawning, primary contact recreation, domestic water supply and special resource water. |
| | Spokane River | 58.01.02.110.12 | Cold water aquatic life, salmonid spawning, primary contact recreation and domestic water supply. |
| | Spokane River (Washington Portion, immediately downstream of Idaho) | WAC 173-201A-130 | *Spokane River* (*Washington portion, between River Mile 58.0 and RM 96.0*): "Class A" waterbody, site-specific temperature criterion of 20ºC. (See); designated uses: domestic, industrial and agricultural water supply; stock watering; migration, rearing, spawning and harvesting of salmonids and other fish; wildlife habitat; recreation including primary contact recreation, sport fishing, boating, and aesthetic enjoyment; and commerce and navigation.<br><br>*Lake Spokane (reservoir formed by the Long Lake Dam on the Spokane River*): Class A and Lake Class water body; designated uses: domestic, industrial and agricultural water supply; stock watering; migration, rearing, spawning and harvesting of salmonids and other fish; wildlife habitat; recreation including primary contact recreation, sport fishing, boating, and aesthetic enjoyment; and commerce and navigation. |
| | Hayden Lake | 58.01.02.110.12 | Cold water aquatic life, salmonid spawning, primary contact recreation and domestic water supply. |
| ***UPPER SNAKE BASIN*** | | | |
| Idaho Falls Urbanized Area | Snake River | 58.01.02.150.03 | Cold water aquatic life, salmonid spawning, primary contact recreation, and domestic water supply. |
| Pocatello Urbanized Area | Portneuf River | 58.01.02.150.10 | Cold water aquatic life, salmonid spawning, and secondary contact recreation. |
| | Pocatello Creek | 58.01.02.150.10 | Undesignated; presumed to be cold water aquatic life and primary contact recreation. |

| ***Appendix 4- Designated Beneficial Uses for Waters Receiving Regulated MS4 Discharges*** | | | |
|---|---|---|---|
| **Urbanized Area or City** | **Receiving Water** | **Citation from IDAPA or WAC** | **Designated Beneficial Uses** *(Note: All waters in Idaho must also be protected for industrial and agricultural water supply, wildlife habitats, and aesthetics)* |
| ***SOUTHWEST BASIN*** | | | |
| Boise/ Nampa Urbanized Area | Boise River and its tributaries (*Five Mile, Ten Mile, Fifteen Mile Creeks, etc.*) | 58.01.02.140.12 | *Boise River, from the Diversion Dam to River Mile 50*: Cold water aquatic life, salmonid spawning, domestic water supply, and primary contact recreation and special resource water.<br>*Boise River, from River Mile 50 to Indian Creek:* Cold water aquatic life, salmonid spawning and primary contact recreation.<br>*Boise River, Indian Creek to mouth*: Cold water aquatic life, salmonid spawning, and primary contact recreation. |
| Nampa Urbanized Area | Indian Creek | 58.01.02.140.12 | Cold water aquatic life, and secondary contact recreation. |
| | Mason Creek | 58.01.02.140.12 | Secondary contact recreation. |
| | Willow Creek | 58.01.02.140.12 | Undesignated; presumed to be cold water aquatic life and primary contact recreation. |
| ***CLEARWATER BASIN*** | | | |
| City of Moscow | Paradise Creek | 58.01.02.120.01 | Coldwater aquatic life salmonid spawning and secondary contact recreation. |
| | | WAC 173-201A-600 | Salmonid spawning, rearing, & migration; primary contact recreation; domestic, industrial, & agricultural water supply; stock watering; wildlife habitat; harvesting; commerce and navigation; boating; and aesthetic values. |
| | South Fork Palouse River | 58.01.02.120.01 | Coldwater aquatic life salmonid spawning secondary contact recreation. |
| | | WAC 173-201A-600 | Salmonid spawning, rearing, & migration; primary contact recreation; domestic, industrial, & agricultural water supply; stock watering; wildlife habitat; harvesting; commerce and navigation; boating; and aesthetic values. |
| Lewiston Urbanized Area | Lower Granite Dam Pool | 58.01.02.120.08 | Cold water aquatic life, primary contact recreation, domestic water supply. |
| | Lindsay Creek | 58.01.02.120.08 | Cold water aquatic life and secondary contact recreation. |
| | Tammany Creek | 58.01.02.130.02 | Cold water aquatic life and secondary contact recreation. |
| | Snake River (Asotin River to Lower Granite Dam Pool) | 58.01.02.130.02 | Cold water aquatic life, primary contact recreation, domestic water supply. |

# Appendix 5: Impairment Status and Applicable TMDLs for Waters Receiving Regulated MS4 Discharges

| ***Appendix 5: Impairment Status and Applicable TMDLs for Waters Receiving Regulated MS4 Discharges*** | | | |
|---|---|---|---|
| **Receiving Water** | **Waterbody Assessment Unit** | **Impairment Pollutants** | **TMDL Status** |
| ***PANHANDLE BASIN*** | | | |
| Coeur d'Alene Lake | ID17010303PN001L_0L<br>*Coeur d'Alene Lake* | Cadmium;<br>Lead;<br>Zinc | No TMDL completed. |
| Fernan Lake | ID17010303PN033 - *Fernan Lake* | Total Phosphorus | *Coeur d'Alene Lake & River Subbasin Assessment and Total Maximum Daily Loads: 2013 Fernan Lake Addendum*, October 2013. Approved November 2013. |
| Spokane River | ID17010305PN004_04<br>*Spokane R.-Coeur d'Alene Lake to Post Falls Dam*<br><br>ID17010305PN003_04<br>*Spokane R.- Post Falls Dam to ID/WA border* | Cadmium;<br>Lead;<br>Total Phosphorus;<br>Zinc | No TMDL completed. |
| Spokane River | *Spokane R.- Washington portion, downstream of the ID/WA border* | Polychlorinated Biphenyls (PCBs) | No TMDL completed. |
| Hayden Lake | ID17010305PN005L_0L<br>*Hayden Lake* | Total Phosphorus | *Sub-Basin Assessment and Total Maximum Daily Loads of Lakes and Streams Located on or Draining to the Rathdrum Prairie (17010305*), November 2000. Approved January 2001. |
| ***UPPER SNAKE BASIN*** | | | |
| Snake River | ID17040201SK001_04 and 001_05<br>*Snake River Dry Bed Creek to River Mile 791* | Not Assessed. | Not applicable. |
| Portneuf River | ID17040208SK001_05<br>*Portneuf R.-Marsh Creek to American Falls Reservoir* | Total Nitrogen<br>Oil and Grease<br>Total Phosphorus<br>*E. coli*<br>Sedimentation /Siltation | *Portneuf River TMDL,* April 2001. *Portneuf River TMDL Revision and Addendum* February 2010. Approved July 2010. |
| Pocatello Creek | ID17040208SK025_02<br>*South Fork Pocatello Creek - source to mouth* | Sedimentation / Siltation | |

| ***Appendix 5: Impairment Status and Applicable TMDLs for Waters Receiving Regulated MS4 Discharges*** | | | |
|---|---|---|---|
| **Receiving Water** | **Waterbody Assessment Unit** | **Impairment Pollutants** | **TMDL Status** |
| ***SOUTHWEST BASIN*** | | | |
| Boise River and tributaries | ID17050114SW011a_06 *Boise R.-Diversion Dam to Veterans Memorial Pkwy*<br>ID17050114SW005_06 *Boise R.-Veterans Memorial Pkwy to Star Bridge*<br><br>ID17050114SW005_06a- *Boise R –Star to Middleton* | Temperature<br><br>Fecal Coliform<br><br>Sedimentation/ Siltation | *No TMDL completed for temperature.*<br><br>*Lower Boise River TMDL Subbasin Assessment, Total Maximum Daily Loads,* September 1999, Approved January, 2000.<br><br>*Lower Boise River Sediment and Bacteria TMDLs Addendum,* April 2008. Approved June, 2008.<br><br>*Lower Boise River TMDL 2015 Sediment and Bacteria Addendum.* June 2015. Approved September 2015. |
| | ID17050114SW005_06b *Boise R.-Middleton to Indian Creek*<br><br>ID17050114SW001_06 *Boise R. - Indian Creek to mouth* | Temperature<br><br>Fecal Coliform<br><br>Sedimentation/ Siltation<br><br>Total Phosphorus | No TMDL completed for temperature<br><br>*Lower Boise River TMDL Subbasin Assessment, Total Maximum Daily Loads,* September 1999, Approved January, 2000.<br><br>*Lower Boise River Sediment and Bacteria TMDLs Addendum,* April 2008. Approved June, 2008.<br><br>*Lower Boise River TMDL 2015 Sediment and Bacteria Addendum.* June 2015. Approved September 2015<br><br>*Lower Boise River TMDL 2015 Total Phosphorus Addendum*. August 2015. Approved December 2015.. |
| Indian Creek | ID17050114SW002_04 *Indian Creek - 4th order below Sugar Ave. in Nampa* | Temperature; Cause Unknown (Nutrients Suspected); *E.* coli; Sedimentation/ Siltation | No TMDL(s) completed for temperature or other causes.<br><br>*Lower Boise River TMDL 2015 Sediment and Bacteria Addendum.* June 2015. Approved September 2015. |
| Indian Creek | ID17050114SW003a_04 *Indian Creek - New York Canal to Sugar Avenue* | Temperature; Cause Unknown; (Nutrients suspected) | No TMDL(s) completed for temperature or other causes |
| Mill Slough | ID17050114SW005_02 *Mill Slough and East Hartley Gulch* | Temperature | No TMDL(s) completed for temperature. |
| Mason Creek | ID17050114SW006_02 *Mason Creek - entire watershed* | Sedimentation/ Siltation; Temperature; Chlorpyrifos; Malathion; *E*. coli; Cause unknown (Nutrients suspected) | *Lower Boise River TMDL 2015 Sediment and Bacteria Addendum.* June 2015. Approved September 2015.<br><br>No TMDL(s) completed for temperature, pesticides, or other causes. |

| ***Appendix 5: Impairment Status and Applicable TMDLs for Waters Receiving Regulated MS4 Discharges*** | | | |
|---|---|---|---|
| **Receiving Water** | **Waterbody Assessment Unit** | **Impairment Pollutants** | **TMDL Status** |
| Fifteen Mile Creek | ID17050114SW007_04-<br>*Fifteenmile Creek - 4th order (Fivemile Creek to mouth*) | Sedimentation/ Siltation;<br>Chlorpyrifos;<br>*E.* coli | *Lower Boise River TMDL*<br>*2015 Sediment and Bacteria Addendum.* June 2015. Approved September 2015.<br><br>No TMDL(s) completed for temperature, pesticides, or other causes. |
| Ten Mile Creek | ID17050114SW008_03-<br>*Tenmile Creek - 3rd order below Blacks Creek Reservoir* | Sedimentation/Siltation<br>Chlorpyrifos;<br>*E*. coli<br>Cause Unknown (Nutrients suspected) | *Lower Boise River TMDL*<br>*2015 Sediment and Bacteria Addendum.* June 2015. Approved September 2015.<br><br>No TMDL(s) completed for pesticides, or other causes. |
| Five Mile Creek | ID17050114SW010_03-<br>*Fivemile Creek - 3rd order tributaries* | Sedimentation/Siltation<br>Chlorpyrifos<br>*E.*coli<br>Cause Unknown (Nutrients suspected) | *Lower Boise River TMDL*<br>*2015 Sediment and Bacteria Addendum.* June 2015. Approved September 2015.<br><br>No TMDL(s) completed for pesticides, or other causes. |
| | ID17050114SW010_02-<br>*Fivemile Creek, Eightmile and Ninemile Creeks - 1st & 2nd order* | *E.*coli | *Lower Boise River TMDL*<br>*2015 Sediment and Bacteria Addendum.* June 2015. Approved September 2015. |
| Willow Creek | ID17050114SW015_03<br>*Willow Creek - 3rd order* | Sedimentation/ Siltation | Lower Boise River TMDL<br>2015 Sediment and Bacteria Addendum. June 2015. Approved September 2015. |
| ***CLEARWATER BASIN*** | | | |
| Paradise Creek | ID17060108CL005_02<br>*Paradise Creek - Urban boundary to Idaho/Washington border* | Ammonia (Un-ionized)<br>*E.* coli<br>Fecal Coliform<br>Nutrient/ Eutrophication Biological Indicators<br>Sedimentation/ Siltation<br>Temperature | *Paradise Creek TMDL Water Body Assessment and Total Maximum Daily Load*<br>*Paradise Creek Total Maximum Daily Load Implementation Plan* December 1999. Approved 2000.<br><br>*Paradise Creek TMDL*<br>*2015 Bacteria Addendum,* October 2015. Submitted to EPA. |
| Paradise Creek (WA portion) | Paradise Creek 10443 (WA-34-1025)<br><br>Paradise Creek 10439 (WA-34-1025)<br><br>Paradise Creek 10444 (WA-34-1025) | Fecal Coliform Bacteria | *South Fork Palouse River Fecal Coliform Bacteria Total Maximum Daily Load - Water Quality Improvement Report* WDOE Publication No. 09-10-060. October 2009. Approved 2009. |
| South Fork Palouse River | ID17060108CL002_03<br>*South Fork Palouse River-Gnat Cr. to Idaho/Washington border* | Nutrient/ Eutrophication;<br>Biological Indicators;<br>Sedimentation/ Siltation<br>Temperature | *South Fork Palouse River Watershed Assessment and TMDLs*, February 2007. Approved October 2007. |

| ***Appendix 5: Impairment Status and Applicable TMDLs for Waters Receiving Regulated MS4 Discharges*** | | | |
|---|---|---|---|
| **Receiving Water** | **Waterbody Assessment Unit** | **Impairment Pollutants** | **TMDL Status** |
| South Fork Palouse River (WA portion) | South Fork (SF) Palouse River 6712 (WA-34-1020)<br><br>SF Palouse River 6711 (WA-34-1020)<br><br>SF Palouse River 6710 (WA-34-1020)<br><br>SF Palouse River 6707 (WA-34-1020) | Fecal coliform bacteria<br>PCBs | *South Fork Palouse River Fecal Coliform Bacteria Total Maximum Daily Load - Water Quality Improvement Report* WDOE Publication No. 09-10-060 October 2009. Approved 2009.<br><br>*Palouse River Chlorinated Pesticide and PCB Total Maximum Daily Load, Water Quality Improvement Report and Implementation Plan;* Publication No. 07-03-018 *July 2007.* Approved November 2007. |
| Snake River | ID17060103SL001_08-<br>*Snake River - Asotin River (Idaho/Oregon border) to Lower Granite Dam pool* | *Temperature* | No TMDL completed. |
| Tammany Creek | ID17060103SL014_02<br>*Tammany Creek - WBID 015 to unnamed tributary*<br><br>ID17060103SL014_03<br>*Tammany Creek - Unnamed Tributary to mouth*<br><br>ID17060103SL016_02<br>*Tammany Creek-source to Unnamed Tributary(T34N, R04W, Sec19)* | *E. coli*<br>Nitrogen, Nitrate<br>Total Phosphorus<br>Sedimentation/ Siltation | *Tammany Creek Watershed (HUC 17060103)*<br>*TMDL Addendum;* September 2010. Approved December 2010. |
| Lower Granite Dam Pool | ID17060306CL001_07<br>*Lower Granite Dam Pool* | None- Fully Supporting beneficial uses. | Not applicable. |
| Lindsay Creek | ID17060306CL003_02 Lindsay Creek -*Source to mouth*<br><br>ID17060306CL003_03 Lindsay Creek - *Source to mouth* | *E.* coli<br>Nutrient/ Eutrophication Biological Indicators<br>Sedimentation/ Siltation | *Lindsay Creek Watershed Assessment and Total Maximum Daily Loads*, December 2006, Amended March 2007. Approved, June 2007. |

# Appendix 6: Rationale for Requirements Based on MS4 Discharges to Impaired Waters without an Applicable TMDL.

This appendix provides EPA's rationale for the additional SWMP requirements for Affected MS4 Permittees discharging into impaired waters, pursuant to MS4GP Part 4.2.

## A. Coeur d'Alene Lake and Spokane River in Idaho

**Summary**: Continued monitoring/assessment of potential pollutant loading from MS4 discharges, combined with targeted pollutant reduction activities, is necessary and appropriate to address waters impaired for cadmium, lead and zinc in the absence of an applicable TMDL.

| Urbanized Area/City | Receiving Water | Waterbody Assessment Unit | Impairment Pollutants | TMDL Status |
|---|---|---|---|---|
| Coeur d'Alene | Coeur d'Alene Lake | ID17010303PN001L_0L<br>*Coeur d'Alene Lake* | Cadmium;<br>Lead;<br>Zinc | No TMDLs completed. |
| Coeur d'Alene | Spokane River | ID17010305PN004_04<br>Spokane R.-Coeur d'Alene Lake to Post Falls Dam<br><br>ID17010305PN003_04<br>Spokane R.- Post Falls Dam to ID/WA border | Cadmium;<br>Lead;<br>Total Phosphorus;<br>Zinc | |

**Discussion:** Affected MS4 Permittees discharging to Coeur d'Alene Lake include the City of Coeur d'Alene, Idaho Transportation Department District #1, and Eastside Highway District.

Affected MS4 Permittees discharging to Spokane River include City of Coeur d'Alene, Idaho Transportation Department District #1, City of Post Falls and Post Falls Highway District.

IDEQ's *2014 Integrated CWA Section 303(d)/Section 305(b) Report* (2014 Integrated Report), Appendix J [*Category 5 (CWA §303(d) list)—waters of the state for which a TMDL is needed*] lists Coeur d'Alene Lake as impaired for cadmium, lead, and zinc.

The 2014 Integrated Report also lists the segments of the Spokane River in Idaho listed above as impaired for cadmium, lead, total phosphorus, and zinc. No TMDLs have been established for the impairment pollutants in these water bodies.[78] Existing water quality information for Coeur d'Alene Lake shows that maintaining an oxygenated condition in the bottom waters minimizes the release of dissolved metals from the sediments into the overlying waters. The Coeur d'Alene Tribe and IDEQ

[78] In 2000, DEQ and EPA completed a metals TMDL for the Coeur d'Alene River subbasin, including Coeur d'Alene Lake, and the segment of the Spokane River where the City's MS4 outfalls are located. The Idaho Supreme Court subsequently ruled that the required rule making procedures were not followed in setting the TMDL, making it null and void. State legislation in 2003 clarified that for all other waters in Idaho, rule making procedures are not required for TMDLs. The legislation, however, kept the rule making requirement identified by the Idaho Supreme Court in place for a metals TMDL for the Coeur d'Alene River subbasin. To date, there is no EPA approved metals TMDL for the lake, for either State or Tribal areas. Because the State court invalidated the Coeur d'Alene River Basin TMDL under State law, there is no longer an EPA approved TMDL for the Lake or relevant section of the Spokane River. Accordingly, EPA is not required by 40 CFR122.44(d)(1)(vii)(B) to establish permit requirements that are consistent with the assumptions and requirements of the invalidated TMDL's wasteload allocations

collaboratively developed the 2009 *Coeur d'Alene Lake Management Plan* (2009 LMP) to protect and improve lake water quality by limiting nutrient inputs that impair lake water quality conditions; excess nutrient loading subsequently influences the solubility of mining-related metals contamination in lake sediments. The 2009 LMP sets lake management goals, objectives, and strategies, including specific actions for water quality management of Coeur d'Alene Lake and its tributaries. The Tribe and IDEQ view the 2009 LMP as a functional equivalent to a nutrient TMDL, and using existing regulatory tools to address nutrient and sediment inputs to Coeur d'Alene Lake is consistent with the 2009 LMP. The MS4GP requirements are consistent with the LMP's management actions for public outreach and education, and for controlling erosion and sediment from construction activities, new development and redevelopment, and roadway surfaces.[79]

EPA previously required the City of Coeur d'Alene and the Idaho Transportation Department District #1 to monitor select MS4 outfalls, in acknowledgement of IDEQ's interest in characterizing nutrients and metals in MS4 discharges to the Lake and to Spokane River to understand pollutant loading from urban sources. For similar reasons, EPA also required the City of Post Falls to monitor their MS4 discharges into the Spokane River.

Data collected by the Cities and ITD District #1 thus far is insufficient to assess the overall effectiveness and adequacy of existing SWMP control measures. However, various MS4 outfall monitoring locations are now established, and EPA believes that continued data collection is appropriate and necessary to continue to refine what is known about pollutant loading from the MS4s. It is appropriate to allow the Cities and ITD District #1 to conduct continued monitoring/assessment activities in a manner that makes sense for their respective programs.

New MS4 maps submitted by the Post Falls Highway District, in compliance with the previously issued MS4 permit, confirms the Post Falls Highway District is also an Affected MS4 Permittee, based on the identification of MS4 outfalls discharging into Spring Creek and other tributaries to the Spokane River.

**Conclusion:** In MS4GP Appendix F.1, EPA requires the Affected MS4 permittees discharging to Coeur d'Alene Lake (City of Coeur d'Alene and Idaho Transportation Department District #1) to revise or continue the storm water monitoring/assessment efforts begun under the prior MS4 permit term(s). Similarly, the Affected MS4 permittees discharging to the Spokane River (City of Coeur d'Alene, Idaho Transportation District #1, City of Post Falls, and Post Falls Highway District) must continue monitoring/assessment activities. EPA encourages these entities to consider continuing the storm water monitoring data collection efforts begun under the prior MS4 permit term(s). Appendix F.1 requires Permittees to submit revised or updated Monitoring/Assessment Plan(s) for review and specific incorporation into the MS4GP no later than 180 days from permit effective date.

In addition, Appendix F.1 requires Affected Permittees to submit descriptions of at least two (2) pollutant reduction activities to target and control discharges of cadmium, lead, zinc, and total phosphorus. Such activities may augment existing control measures, or may target new actions, as deemed appropriate by the Permittee(s). EPA will review and consider modifying relevant sections of Appendix F.1 to incorporate the specific Permittee's pollutant monitoring/assessment and pollutant reduction activities.

[79] See: Tables C1 and C3 of the *Coeur d'Alene Lake Management Plan* (IDEQ & Coeur d'Alene Tribe, March 2009).

## B. Spokane River Downstream of the ID/WA border

**Summary:** Continued monitoring/assessment of pollutant loading from MS4 discharges, combined with targeted pollutant reduction activities, is necessary and appropriate to address potential contribution into PCB- impaired waters of the downstream affected State in the absence of an applicable TMDL.

| Urbanized Area/City | Receiving Water | Waterbody Assessment Unit | Impairment Pollutants | TMDL Status |
|---|---|---|---|---|
| Coeur d'Alene | Spokane River | *Spokane R.- downstream of the ID/WA border* | Polychlorinated Biphenyls (PCBs) | No TMDL completed. |

**Discussion:** Affected MS4 Permittees discharging to Spokane River include City of Coeur d'Alene, Idaho Transportation Department District #1, City of Post Falls and Post Falls Highway District.

Downstream WQ impairments require that EPA include terms and conditions in the MS4GP to reflect appropriate WQBELs for impairment parameters. See 40 CFR §122.44 (d)(4) & (d)(5).

The Washington Department of Ecology's (Ecology) *2012 Water Quality Assessment Report* lists the Spokane River, downstream of the Idaho/Washington border, as not meeting the water quality standards for polychlorinated biphenyls (PCBs). Ecology's current water quality criterion for total PCBs is 170 picograms per liter (pg/L). In January 2015, Ecology proposed revisions to its water quality criteria established to protect human health; including a generally applicable narrative water quality criterion that "*[a]ll waters shall maintain a level of water quality when entering downstream waters that provides for the attainment and maintenance of the water quality standards of those downstream waters, including the waters of another state."* In addition, the waters of the Spokane Tribe are located further downstream from the segments of the Spokane River that Ecology considers impaired. The Tribe's water quality criterion for total PCBs, approved by EPA in 2013, is 1.3 pg/L, more than two orders of magnitude lower than the current Washington criterion, and perhaps the lowest PCB criterion in the country.[80]

In response to a U.S District Court order and remand pertaining to the status of a TMDL to address the PCB impairment, (and in consultation with Ecology), EPA developed a plan (EPA Plan) outlining significant regulatory and non-regulatory actions necessary to identify and address sources of PCB pollution in the Spokane River. In this document, EPA provides context regarding PCB contamination in the River, and recommendations for monitoring and further control of PCB sources in order to attain both Ecology's and the Spokane Tribes' PCB water quality criteria. EPA's Plan recommends that NPDES permits continue to use a BMP approach to PCB control and require the use of monitoring methods that are sensitive enough to characterize PCB levels that can be compared to the Washington WQS.

**Conclusion:** EPA has determined it appropriate to include requirements in MS4GP Appendix F.2 for Affected Permittees to submit descriptions of at least two (2) pollutant reduction activities by which the Permittee will address whether legacy PCBs are discharged through their MS4 into the Spokane River. Such BMP activities may augment existing SWMP control measures, or may focus on completely new

[80] See: *EPA's Plan for Addressing PCBs in the Spokane River, Defendants' Response to the Remand by the Court, Sierra Club, et al. v. McLerran, No. C11-1759-BJR (July 14, 2015),* pages 2-5.

actions, as may be deemed appropriate by the Permittee(s). Examples of BMPs used by other regulated MS4 operators to address PCB loading are available in the Administrative Record for the MS4GP.

MS4GP Appendix F.2 also requires the continued monitoring/assessment of PCBs from regulated MS4 discharges into the Spokane River. In the prior individual MS4 permits, the Existing Permittees (except Post Falls Highway District) were required to use the EPA-approved analytical Method 608 to measure PCBs in their MS4 discharges; all sampling conducted to date using EPA Method 608 found non-detectable levels of PCBs. However, EPA's Plan discusses the limitations of the EPA-approved analytical methods for PCBs, specifically noting that current EPA approved methods are not sufficiently sensitive to assess PCBs in water at the levels needed to compare with the downstream WQS in Washington. The Plan notes that, because actual discharges from Spokane River point sources have been orders of magnitude below the quantification limits of the approved methods, the EPA approved methods provide no quantitative data on the actual loading of PCBs from point sources, no incentive for point sources to reduce discharges, nor any means to determine whether the discharges are increasing or decreasing. EPA is therefore using its authority to specify in the MS4GP that, if the Affected Permittee elects to continue monitoring/assessment of MS4 discharges, they must use EPA Method 1668C for monitoring of PCBs in water.[81]

Alternatively, in order to continue assessment of regulated MS4 discharges as possible source(s) of PCBs into the Spokane River, and to quantify any estimated pollutant removed or prevented from discharging through the MS4, the Affected Permittee may instead select to monitor/assess PCBs in accumulated sediment removed from the MS4's catch basins. In such situations, EPA Method 8082 continues to be an appropriate method for sampling PCBs in catch basin solids.

MS4GP Appendix F.2 and Part 6.2.6.1 provide the Affected Permittees with options for monitoring/assessing for PCBs, offering maximum implementation flexibility to address potential PCB loading from their MS4 discharges.

MS4GP Appendix F.2 requires Affected Permittee(s) to submit new or updated Monitoring/Assessment Plan(s) and pollutant reduction activity descriptions for review and specific incorporation into the MS4GP no later than 180 days from permit effective date. EPA will review and consider modifying relevant potions of MS4GP Appendix F.2 to incorporate the specific Permittee's pollutant monitoring/assessment and pollutant reduction activities.

[81] See *EPA's Plan for Addressing PCBs in the Spokane River, Defendants' Response to the Remand by the Court, Sierra Club, et al. v. McLerran, No. C11-1759-BJR (July 14, 2015)* Appendix B pages. 2-8.

## C. Lower Boise River

**Summary:** Monitoring/assessment of potential temperature impacts from MS4 discharges, combined with targeted pollutant reduction activities, is necessary and appropriate to address waters impaired for temperature in the absence of an applicable TMDL.

| Urbanized Area/City | Receiving Water | Waterbody Assessment Unit | Impairment Pollutants | TMDL Status |
|---|---|---|---|---|
| Boise/ Nampa | Boise River | ID17050114SW011a_06<br>*Boise R.-Diversion Dam to Veterans Memorial Pkwy*<br><br>ID17050114SW005_06<br>*Boise R. Veterans Memorial Parkway to Star Bridge*<br><br>ID17050114SW005_06a<br>*Boise R.-Star to Middleton*<br><br>ID17050114SW005_06b<br>*Boise R.-Middleton to Indian Creek*<br><br>ID17050114SW001_06 –<br>*Boise R.-Indian Creek to the mouth* | Temperature | No TMDL completed. |

**Discussion:** Affected MS4 Permittees discharging to these impaired segments include the Ada County Highway District (ACHD), Idaho Transportation Department District #3, Nampa, Caldwell, Nampa Highway District #1, and Canyon Highway District #4.

IDEQ's 2014 Integrated Report, Appendix J, lists the segments of the Boise River cited above as impaired for temperature; no TMDLs are yet established for these segments of the Boise River.

**Conclusion:** In MS4GP Appendix F.4, EPA requires Affected MS4 Permittees to monitor MS4 discharges for temperature. In the prior individual MS4 permits, the Existing Permittees were not required to monitor their MS4 discharges for temperature. Temperature is now a required parameter for monitoring/assessment activities for all Affected MS4 Permittees that discharge to these impaired segments.

EPA is not requiring additional SWMP control measures to address temperature impairments at this time. However, Affected Permittees may elect to focus one or more of their targeted pollutant reduction activities on temperature. See additional discussion for this watershed in Appendix 7.D of this Fact Sheet.

Appendix F.4 requires Permittee(s) must submit new or updated Monitoring/Assessment Plan(s) and pollutant reduction activity descriptions for review and specific incorporation into the MS4GP no later than 180 days from permit effective date. EPA will review and consider modifying Appendix F.4 to incorporate the specific Permittee's pollutant monitoring/assessment and pollutant reduction activities.

## D. Indian Creek

**Summary:** Monitoring/assessment of potential temperature impacts from MS4 discharges, combined with targeted pollutant reduction activities, is necessary and appropriate to address waters impaired for temperature in the absence of an applicable TMDL.

| Urbanized Area/City | Receiving Water | Waterbody Assessment Unit | Impairment Pollutants | TMDL Status |
|---|---|---|---|---|
| Nampa | Indian Creek | ID17050114SW002_04<br>*Indian Creek - Sugar Ave. to Boise River* | Temperature;<br>Cause Unknown<br>(Nutrients Suspected) | No TMDL completed. |
| Nampa | Indian Creek | ID17050114SW003a_04<br>*Indian Creek - New York Canal to Sugar Avenue* | Temperature;<br>Cause Unknown;<br>(Nutrients suspected) | |

**Discussion:** Affected MS4 Permittees discharging to Indian Creek include Nampa, Caldwell, Nampa Highway District, and Canyon Highway District.

IDEQ's 2014 Integrated Report, Appendix J lists these segments of Indian Creek as impaired for temperature; nutrients are suspected to also contribute to the impairment. No TMDLs have yet been established.

**Conclusion:** In MS4GP Appendix F.4.4 through F.4.7, EPA requires the Affected Permittees to monitor/assess their MS4 discharges for temperature and continue monitoring/assessment for total phosphorus.

EPA is not requiring additional SWMP control measures at this time. Implementation of the SWMP control measures in the MS4GP Part 3 will substantively reduce sediment loadings, which in turn will reduce phosphorus loading through the MS4. These measures include specifications for erosion and sediment control, as well as permanent storm water management controls, for site development disturbing 5,000 square feet or more. Enforceable requirements are required for sites disturbing 1 or more acres. In addition, proper operation and maintenance of the MS4 (including regular sweeping of roadway surfaces) will enhance the removal of sediment solids from the MS4s discharging into these impaired segments. These measures, combined with the enhanced illicit discharge assessment activities required to address the LBR Phosphorus TMDL, are sufficient to address and assess the urban storm water contribution to the impairments to Indian Creek.

Appendix F.4.4 through F.4.7 requires the Permittee(s) to submit new or updated Monitoring/Assessment Plan(s) and pollutant reduction activity descriptions for review and specific incorporation into the MS4GP no later than 180 days from permit effective date. EPA will review and consider modifying relevant portions of Appendix F.4 to incorporate the specific Permittee's pollutant monitoring/assessment and pollutant reduction activities.

## E. Mill Slough

**Summary:** Monitoring/assessment of potential temperature impacts from MS4 discharges, combined with targeted pollutant reduction activities, is necessary and appropriate to address waters impaired for temperature in the absence of an applicable TMDL.

| Urbanized Area/City | Receiving Water | Waterbody Assessment Unit | Impairment Pollutants | TMDL Status |
|---|---|---|---|---|
| Nampa | Mill Slough | ID17050114SW005_02<br>*Mill Slough and Phyllis Slough* | Temperature | No TMDL has been completed |

**Discussion**: The Affected MS4 Permittee discharging to this waterbody is the City of Middleton.

IDEQ's 2014 Integrated Report, Appendix J, lists Mill Slough as impaired for temperature; no TMDLs have been established.

**Conclusion**: In MS4GP Appendix F.4.3, EPA requires Middleton to monitor/assess MS4 discharges for temperature. EPA is not requiring additional SWMP control measures to address temperature impairments at this time. Implementation of the SWMP control measures in the MS4GP Part 3 is sufficient to address and assess the contribution of urban storm water to temperature impacts in the Mill Slough. Appendix F.4.3 requires the Permittee must submit new or updated Monitoring/Assessment Plan(s) and pollutant reduction activity descriptions for review and specific incorporation into the MS4GP no later than 180 days from permit effective date. EPA will review and consider modifying Appendix F.4 to incorporate the specific Permittee's pollutant monitoring/assessment and pollutant reduction activities.

## F. Mason, Fifteenmile, Tenmile, and Fivemile Creeks

**Summary:** Monitoring/assessment of potential temperature impacts from MS4 discharges, combined with targeted pollutant reduction activities, is necessary and appropriate to address waters impaired for temperature in the absence of an applicable TMDL. EPA adds chlorpyrifos and malathion to the list of pollutant parameters to be monitored.

| Urbanized Area/City | Receiving Water | Waterbody Assessment Unit | Impairment Pollutants | TMDL Status |
|---|---|---|---|---|
| Nampa | Mason Creek | ID17050114SW006_02 *Mason Creek - entire watershed* | Temperature; Chlorpyrifos; Malathion; Cause unknown (Nutrients suspected) | No TMDL completed. |
| Nampa | Fifteenmile Creek | ID17050114SW007_04- *Fifteenmile Creek - 4th order (Fivemile Creek to mouth*) | Chlorpyrifos; | |
| Nampa | Tenmile Creek | ID17050114SW008_03- *Tenmile Creek - 3rd order below Blacks Creek Reservoir* | Chlorpyrifos; Cause Unknown (Nutrients suspected) | No TMDL completed. |
| Nampa | Fivemile Creek | ID17050114SW010_03- *Fivemile Creek - 3rd order tributaries* | Chlorpyrifos; Cause Unknown (Nutrients suspected) | |

**Discussion:** Affected MS4 Permittees discharging to these waters include ACHD, City of Nampa, and City of Caldwell.

IDEQ's 2014 Integrated Report, Appendix J, lists Mason, Fifteenmile, Tenmile, and Fivemile Creeks as impaired for the agricultural pesticide chlorpyrifos; Mason Creek is also listed for temperature and malathion. Mason, Tenmile, and Fivemile Creeks are also suspected to be impaired for nutrients. No TMDLs for these pollutants in these waters have yet been established.

**Conclusion:** In MS4GP Appendix F.4, EPA requires monitoring of storm water discharges for temperature. Implementation of the SWMP control measures in the MS4GP Part 3 are sufficient to address and assess the contribution of urban storm water to these impairments in Mason, Fifteenmile, Tenmile, and Fivemile Creeks. Appendix F.4.3 requires the Permittee must submit new or updated Monitoring/Assessment Plan(s) and pollutant reduction activity descriptions for review and specific incorporation into the MS4GP no later than 180 days from permit effective date. EPA will review and consider modifying Appendix F.4 to incorporate the specific Permittee's pollutant monitoring/assessment and pollutant reduction activities.

## G. Snake River

**Summary**: Monitoring/assessment of potential temperature impacts from MS4 discharges, combined with targeted pollutant reduction activities, is necessary and appropriate to address waters impaired for temperature in the absence of an applicable TMDL. To better assess potential impacts from MS4 discharges on ESA-listed species, Affected Permittees must also monitor/assess for additional pollutants in MS4 discharges, and/or conduct pollutant reduction activities as determined through EPA's consultation with NOAA-Fisheries and USFWS.

| Urbanized Area/City | Receiving Water | Waterbody Assessment Unit | Impairment Pollutants | TMDL Status |
|---|---|---|---|---|
| Lewiston | Snake River | ID17060103SL001_08-<br>*Snake River - Asotin River (Idaho/Oregon border) to Lower Granite Dam pool* | Temperature | No TMDL completed. |

**Discussion:** Affected MS4 Permittees discharging to this portion of the Snake River includes, but is not limited to, the City of Lewiston, ITD District #2, and, as an interconnected discharge through the City of Lewiston MS4, the Lewis-Clark College. These Affected Permittees are New Permittees under the MS4GP that have not yet implemented a comprehensive Storm Water Management Program in compliance with an applicable NPDES permit for MS4 discharges.

IDEQ's 2014 Integrated Report, Appendix J, lists the portion of the Snake River cited above as impaired for temperature. No TMDL has been completed.

At this time, EPA determines that the Affected Permittees' full implementation of the SWMP control measures in the MS4GP Part 3 will be sufficient to control the pollutant contribution of urban storm water to the temperature impairment. Full implementation of the SWMP control measures is also expected to adequately control pollutants to protect ESA-listed species present in Lower Granite Dam Pool. Monitoring/assessment of additional parameters, as well as specific pollutant reduction activities, will be necessary to demonstrate this pollutant control over the five-year term of the MS4GP.

**Conclusion:** In MS4GP Appendix F.6, EPA requires City of Lewiston to monitor/assess storm water discharges into Lower Granite Dam Pool for temperature. EPA is not requiring additional SWMP control measures to address temperature impairments at this time. A final list of pollutants of concern will be included in the final MS4GP Appendix F.6 as a result of EPA's consultation with USFW and NOAA Fisheries.

# Appendix 7: Rationale for Requirements to Comply with Applicable TMDLs

This appendix contains EPA's rationale for the additional SWMP requirements pursuant to the MS4GP Part 4, and detailed in MS4GP Appendix F, for Affected MS4 Permittees.

This appendix also provides EPA's rationale to not include otherwise applicable TMDLs in MS4GP Appendix F, where EPA has determined that compliance with the MS4GP constitutes compliance with the WLAs for those Affected MS4 Permittees.

## A. Fernan Lake

**Summary:** EPA requires no additional monitoring/assessment or pollutant reduction activities for regulated small MS4 Permittees discharging to Fernan Lake to ensure compliance with the WLAs in the applicable TMDL. Implementation of the comprehensive SWMP control measures (as directed in MS4GP Part 3) is consistent with the EPA-approved TMDL.

| Urbanized Area | Receiving Water | Waterbody Assessment Unit | Impairment Pollutant | TMDL Status |
|---|---|---|---|---|
| Coeur d'Alene | Fernan Lake | ID17010303PN033_0L *Fernan Lake* | Total Phosphorus | *Coeur d'Alene Lake and River Subbasin Assessment and Total Maximum Daily Loads: 2013 Fernan Lake Addendum*, October 2013. Approved November 2013. |

**Discussion**: City of Coeur d'Alene, Idaho Transportation Department and Eastside Highway District are regulated small MS4s discharging to Fernan Lake from the MS4 Permit Area.[82]

Fernan Lake does not meet the Idaho WQS narrative criteria due to periodic blooms of blue-green algae. In the *Coeur d'Alene Lake and River Subbasin Assessment and Total Maximum Daily Loads: 2013 Fernan Lake Addendum* (Fernan Lake TMDL), approved by EPA on November 6, 2013, IDEQ established a total phosphorus (TP) target of 20 µg/L for all sources, and a target load reduction from current conditions of 35% is assigned to all contributing sources.[83]

The Fernan Lake TMDL states that regulated small MS4s must implement a comprehensive SWMP to control pollutants in storm water discharges to the maximum extent practicable. The TMDL does not specify any additional, mandatory actions or activities for regulated small MS4 discharges. Compliance with the load reduction targets will be determined using data collected by the Citizen's Volunteer Monitoring Program from the Fernan Lake deep monitoring station. No TMDL Implementation Plan for Fernan Lake exists at this time. IDEQ expects attainment of the beneficial uses in Fernan Lake within 20 years (by Year 2033).

[82] See *Fernan Lake TMDL Appendix B*.

[83] See: http://www.deq.idaho.gov/media/1075241-cda_lake_river_sba_tmdl_fernan_lake_addendum_1013.pdf; in particular, see: Figure 17- *Map of the 2010 Census-Delineated Urbanized Area near Fernan Lake* (page 35) and Table 16- *TP load allocations for Fernan Lake, by source* (page 60).

**Conclusion for MS4 Discharges to Fernan Lake:** EPA has determined that no additional requirements are necessary to ensure compliance with the load reduction target/WLA assigned to the MS4s operated by the entities listed above. SWMP control measures in MS4GP Part 3 will sufficiently reduce sediment and total phosphorus loading in discharges from their MS4 discharges. These measures include specifications for erosion and sediment control, as well as permanent storm water management controls, for site development disturbing 5,000 square feet or more. Enforceable requirements are required for sites disturbing 1 or more acres. In addition, proper operation and maintenance of the MS4 (including regular sweeping of roadway surfaces) will enhance the removal of sediment solids from the MS4s discharging into these impaired segments. EPA and IDEQ will evaluate the required Annual Reports submitted by each MS4 operator to assess each entity's implementation of the required SWMP measures.

Implementation of the comprehensive SWMP control measures by City of Coeur d'Alene, Idaho Transportation Department and Eastside Highway District in areas where their MS4(s) discharge to Fernan Lake will be fully consistent with the Fernan Lake TMDL.

## B. Hayden Lake

**Summary:** There are no WLAs established by the EPA-approved TMDL for Hayden Lake. Implementation of the comprehensive SWMP by Lakes Highway District (as directed in MS4GP Part 3) is consistent with the EPA-approved TMDL.

| Urbanized Area | Receiving Water | Waterbody Assessment Unit | Impairment Pollutants | TMDL Status |
|---|---|---|---|---|
| Coeur d'Alene | Hayden Lake | ID17010305PN005L_0L *Hayden Lake* | Total Phosphorus | *Sub-Basin Assessment and Total Maximum Daily Loads of Lakes and Streams Located on or Draining to the Rathdrum Prairie (17010305*), November 2000. Approved January 2001.[84] |

**Discussion:** Hayden Lake does not meet the Idaho WQS narrative criteria due to periodic algae blooms. EPA approved the *Sub-Basin Assessment and Total Maximum Daily Loads of Lakes and Streams Located on or Draining to the Rathdrum Prairie (17010305)* (Hayden Lake TMDL) on January 31, 2001. IDEQ established a TP target of 7 µg/L for the lake, and a TP load reduction target of 10.7% from all nonpoint sources discharging into the lake, including residential storm water runoff. IDEQ did not assign WLAs to any point sources discharging into Hayden Lake.[85]

The Hayden Lake Watershed Association continues to provide ongoing public education resources regarding appropriate best management practices for homeowners that serve to reduce sediment and associated phosphorus loading into Hayden Lake.

Lakes Highway District operates roadside storm water conveyances within the MS4 Permit Area in unincorporated Kootenai County at the southern end of Hayden Lake. Lakes Highway District must continue to implement SWMP control measures as described in the MS4GP Part 3. These required SWMP measures will substantively reduce sediment and associated total phosphorus loading from the MS4, and include specification for erosion and sediment control and onsite storm water management controls for road development occurring at project sites disturbing 5,000 square feet or more. In addition, proper operation and maintenance of the MS4 (including regular sweeping of roadway surfaces) will enhance the removal of sediment solids from the portion of the MS4 discharging into Hayden Lake. EPA encourages Lakes Highway District to work cooperatively with the Hayden Lake Watershed Association to continue using effective erosion control strategies in sub-sewershed drainage areas that could affect water quality in the Lake.

**Conclusion for MS4 Discharges to Hayden Lake**: Lakes Highway District's continued implementation of the comprehensive SWMP as outlined in the MS4GP Part 3 is consistent with the EPA-approved TMDL for Hayden Lake; no additional requirements are necessary to ensure compliance with the Hayden Lake TMDL's target for total phosphorus.

[84] The TMDL is available online at http://www.deq.idaho.gov/media/452833-upper_spokane_entire.pdf

[85] See: Hayden Lake TMDL, pages 31-35.

## C. Portneuf River

**Summary:** Consistent with the WLAs established in the EPA-approved Portneuf River TMDL, continued monitoring/assessment of potential pollutant loading from MS4 discharges, combined with targeted pollutant reduction activities, is necessary and appropriate to reduce pollutants in MS4 discharges to the Portneuf River.

| Urbanized Area/City | Receiving Water | Waterbody Assessment Unit | Impairment Pollutants | TMDL Status |
|---|---|---|---|---|
| Pocatello | Portneuf River | ID17040208SK001_05<br>*Portneuf R.-Marsh Creek to American Falls Reservoir* | Total Nitrogen<br>Oil and Grease<br>Total Phosphorus<br>*E. coli*<br>Sedimentation /Siltation | *Portneuf River TMDL,* April 2001. *Portneuf River TMDL Revision and Addendum* February 2010. Approved July 2010. [86] |
| | Pocatello Creek | ID17040208SK025_02<br>*South Fork Pocatello Creek - source to mouth* | Sedimentation / Siltation | |

**Discussion:** Affected MS4 Permittees that discharge directly or indirectly to the Portneuf River within the MS4 Permit Area includes City of Chubbuck; City of Pocatello; Bannock County; Idaho State University, and Idaho Transportation Department District #5.

The main stem Portneuf River within the MS4 Permit Area does not meet the Idaho water quality standards narrative criteria for *E. coli*, nutrients (total phosphorus), oil and grease, and sedimentation/siltation. The *Portneuf River TMDL Revision and Addendum* (Portneuf TMDL) approved by EPA on July 29, 2010, quantifies pollutant sources, and allocates responsibility for load reductions needed to meet water quality standards and/or the targets described therein.[87]

IDEQ assigned urban storm water WLAs to the NPDES-regulated small MS4s discharging to the Portneuf River main stem for total phosphorus, and oil & grease. IDEQ defined load reduction targets for suspended sediment and *E. coli*.

The Portneuf TMDL sets TSS target concentrations for the main stem at 35 mg/L (low flow) and 80 mg/L (high flow), and TP targets for the main stem of 0.07 mg/L (low flow) and 0.125 mg/L (high flow). Corresponding WLAs for the MS4 Permittees represent the median daily TSS and TP loads translated from daily turbidity monitoring data collected during calendar years 2004 through 2006 and relevant instream monitoring stations upstream of Pocatello at the Edson Fichter Nature Area (EFNA) at River Mile 22.5, and downstream of Pocatello at Batiste Road at River Mile 13.4. IDEQ used the difference in discharge between Batiste and EFNA monitoring stations and the corresponding TSS and TP targets to

[86] Available online at:
http://deq.idaho.gov/media/464542_water_data_reports_surface_water_tmdls_portneuf_river_portneuf_river_revision_addendum_final.pdf

[87] See *Portneuf River TMDL Revision and Addendum* (Portneuf TMDL):
http://deq.idaho.gov/media/464542_water_data_reports_surface_water_tmdls_portneuf_river_portneuf_river_revision_addendum_final.pdf

estimate storm water target loads/load allocations. According to the TMDL, Affected MS4 Permittees must reduce TSS and TP by up to 84% and 75%, respectively (during high flow/wet weather events occurring typically in the month of April) in order to meet the TMDL's most stringent monthly targets.[88]

The Portneuf TMDL establishes an oil and grease WLA target of 5 mg/L. Prior monitoring indicates oil and grease is present in the Portneuf River as it passes through the Pocatello UA, entering through storm drains during or immediately following storm events. IDEQ's TMDL recommends regular and event-focused monitoring of oil and grease to describe background concentrations and characterize their temporal and spatial loading patterns in the lower Portneuf River. Where possible, Affected Permittees should consider using BMPs to minimize oil and grease loading to the River.[89] The Permittees continue to impose such BMPs. For example, in 2015, the City of Pocatello and IDEQ began collaborating with a major industrial landowner in the UA to identify structural BMP project(s) to mitigate pollutant contributions entering through the City's MS4 to the River. EPA strongly encourages such collaborative projects to continue during the MS4 General Permit.

The Portneuf TMDL establishes a load reduction target for *E.coli* of 126 organisms/100 mL, corresponding with water quality criteria for secondary contact recreation.[90]

No specific timeframe is established by DEQ in the Portneuf TMDL for attaining beneficial uses in the main stem of the Portneuf River. The TMDL states, however, that:

> "S*ubstantial progress towards the reduction of current pollutant loads is expected to occur within the next 10 years….Development of appropriate monitoring programs is vital to understanding the success of individual BMPs and to quantify the benefits to subwatersheds and the larger subbasin.*" [91]

The TMDL also states that targeted and continuous sampling of storm water discharges is necessary to characterize the concentration of constituents introduced into the Portneuf River during precipitation or melting events. IDEQ recommends sampling of multiple storm water outfalls to characterize the range of variation detected among outfalls. Instream sampling is necessary to estimate storm water loads associated with urban sources within the Pocatello UA.

Finally, the TMDL further recommends that sampling of storm water discharges is appropriate to evaluate the efficacy of storm water BMPs, citing two existing storm water basins used by City of Pocatello that successfully treat storm water within the UA (near First Street and at Day Street-Sacajawea Park, respectively).[92] EPA encourages the Affected MS4 permittees, collectively, to pursue both structural and treatment practices within the UA. Based on the data collected during the previous

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[88] See Portneuf TMDL, Table 5.4-page 110, and Table 5.8-page 118.

[89] See Portneuf TMDL, page 129-131.

[90] See Portneuf TMDL, pages 95-96.

[91] See Portneuf TMDL, page 154.

[92] See Portneuf TMDL, Page 87

MS4 permit term, EPA recommends that the Affected MS4 permittees consider locating future structural treatment devices in drainage areas leading to the Halliday and Lander Street outfalls. [93]

**Conclusion:** In MS4GP Appendix F.3, EPA requires the Affected MS4 Permittees discharging to Portneuf River to revise or continue the storm water monitoring/assessment efforts begun under the prior MS4 permit term. In addition, Appendix F.3 requires Affected MS4 Permittees to submit descriptions of at least two (2) pollutant reduction activities to target and control discharges of total nitrogen; oil and grease; total phosphorus; *E. coli;* and Sedimentation/Siltation. Such activities may augment existing control measures, or may target new actions, as deemed appropriate by the Permittee(s).

EPA determines that continued implementation of the comprehensive SWMP control measures by City of Pocatello, City of Chubbuck, Bannock County, Idaho Transportation Department District #5, and Idaho State University (as directed in MS4GP Part 3) is fully consistent with the Portneuf TMDL approved by EPA. These measures include specifications for erosion and sediment control, as well as permanent storm water management controls, for site development disturbing 5,000 square feet or more. Enforceable requirements are required for sites disturbing 1 or more acres. In addition, proper operation and maintenance of the MS4 (including regular sweeping of roadway surfaces) will enhance the removal of sediment solids from the MS4s discharging into these impaired segments. EPA and IDEQ will evaluate the required Annual Reports submitted by each MS4 operator to assess each entity's implementation of the required SWMP measures.

MS4GP Appendix F.3 requires the Affected Permittee(s) to submit new or updated Monitoring/Assessment Plan(s) and pollutant reduction activity descriptions for review and specific incorporation into the MS4GP no later than 180 days from permit effective date. EPA will review and consider modifying relevant potions of MS4GP Appendix F.2 to incorporate the specific Permittee's pollutant monitoring/assessment and pollutant reduction activities.

[93] See Portneuf TMDL, Page 92.

## D. Lower Boise River

**Summary:** Continued monitoring/assessment of potential pollutant loading from MS4 discharges, combined with targeted pollutant reduction activities, is necessary and appropriate to reduce sediment, bacteria, and total phosphorus in MS4 discharges to these impaired Lower Boise River (LBR) segments consistent with the WLAs established in the EPA-approved TMDLs.

| Urbanized Area/City | Receiving Water | Waterbody Assessment Unit | Impairment Pollutants | TMDL Status |
|---|---|---|---|---|
| Boise/ Nampa | Boise River | ID17050114SW001_06 *Boise R. - Indian Creek to mouth*<br><br>ID17050114SW005_06 *Boise R.-Veterans Memorial Pkwy to Star Bridge*<br><br>ID17050114SW005_06a- *Boise R –Star to Middleton*<br><br>ID17050114SW005_06b *Boise R.-Middleton to Indian Creek* | Fecal Coliform<br><br>Sedimentation/Siltation | *Lower Boise River TMDL Subbasin Assessment, Total Maximum Daily Loads,* September 1999. Approved January 2000.<br><br>*Sediment and Bacteria Allocations Addendum to the Lower Boise River TMDL,* April 2008. Approved 2008. |
| **Urbanized Area/City** | **Receiving Water** | **Waterbody Assessment Unit** | **Impairment Pollutant** | **TMDL Status** |
| Boise/ Nampa | Boise River | ID17050114SW001_06 – *Boise R.-Indian Creek to the mouth*<br><br>ID17050114SW005_06b *Boise R-Middleton to Indian Creek* | Total Phosphorus | *Lower Boise River TMDL: Subbasin Assessment, Total Maximum Daily Loads* (September 1999. Approved January 2000.<br><br>*Lower Boise River TMDL 2015 Total Phosphorus Addendum*. August 2015. Approved December 2015. |

### *1. Discussion of LBR Sediment and Bacteria WLAs*

Affected MS4 Permittees discharging directly or indirectly to the main stem LBR from the portion of the watershed located within the MS4 Permit Area of Ada and Canyon Counties include: ACHD, City of Middleton; City of Caldwell; City of Nampa; Idaho Transportation District #3; Canyon Highway District #4; and Nampa Highway District #1.

In 1999, IDEQ originally established the *Lower Boise River TMDL: Subbasin Assessment, Total Maximum Daily Loads* (1999 LBR TMDL) for sediment and bacteria impairments in the segments representing the LBR main stem. The 1999 LBR TMDL establishes sediment allocations for reaches of the LBR upstream of Middleton equal to the 1995 baseline conditions (e.g. the allocations represent a 0% reduction in sediment, or no net increase). The TMDL considers urban and suburban land uses upstream of Middleton as contributing sediment sources to the main stem LBR, and states that the comprehensive municipal SWMP, as implemented through a NPDES permit, is likely sufficient to meet the sediment TMDL allocations.[94]

IDEQ's bacteria TMDL assigned estimated bacteria load allocations to various tributaries based on meeting a fecal coliform target concentration. The TMDL estimates that more than 70% of the nonpoint

[94] See: *Lower Boise River TMDL Subbasin Assessment* (1999), Table 14, pg 58-61.

source bacteria load must be reduced from the area upstream of the Middleton compliance point.[95] In 2007, IDEQ revised its WQS indicator for bacteria from fecal coliform to *E. coli*, represented as 126 cfu/100 ml, based on the geometric mean of five samples taken 3-7 days apart over a 30-day period. The *2003 Implementation Plan for the Lower Boise Watershed* (2003 LBR Plan) references the federal NPDES storm water requirements, and cites a menu of activities expected to reduce sediment and bacteria from upstream urban and suburban land uses, such as: targeted public education, construction site runoff control, and on-site management of post-construction runoff from new development and redevelopment.[96]

**Conclusion, Sediment and Bacteria Controls for MS4 Discharges to Boise RIver**: In MS4GP Appendix F.4, EPA requires the Affected MS4 Permittees discharging to impaired segments of the Boise River and its tributaries to revise or continue the storm water monitoring/assessment efforts begun under the prior MS4 permit term. In addition, Appendix F.4 requires Affected MS4 Permittees to submit descriptions of at least two (2) pollutant reduction activities to target and control discharges of *E. coli* and Sedimentation/Siltation. Such activities may augment existing control measures, or may target new actions, as deemed appropriate by the Permittee(s).

EPA determines that continued implementation of the comprehensive SWMP control measures by ACHD, City of Middleton; City of Caldwell; City of Nampa; Idaho Transportation District #3; Canyon Highway District #4; and Nampa Highway District #1 (as directed in MS4GP Part 3) is fully consistent with the 1999 LBR TMDL approved by EPA. These measures include specifications for erosion and sediment control, as well as permanent storm water management controls, for site development disturbing 5,000 square feet or more. Enforceable requirements are required for sites disturbing 1 or more acres. In addition, proper operation and maintenance of the MS4 (including regular sweeping of roadway surfaces) will enhance the removal of sediment solids from the MS4s discharging into these impaired segments. EPA and IDEQ will evaluate the required Annual Reports submitted by each MS4 operator to assess each entity's implementation of the required SWMP measures.

MS4GP Appendix F.4 requires the Affected Permittee(s) to submit new or updated Monitoring/Assessment Plan(s) and pollutant reduction activity descriptions for review and specific incorporation into the MS4GP no later than 180 days from permit effective date. EPA will review and consider modifying relevant potions of MS4GP Appendix F.4 to incorporate the specific Permittee's pollutant monitoring/assessment and pollutant reduction activities.

Permittees should focus their collective energy on the pollutant reduction goals of the Lower Boise River watershed, and consider conducting their monitoring/assessment efforts related to sources or facilities that are most likely to discharge pollutants of concern. Affected Permittees may also consider

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[95] See *Lower Boise River TMDL Subbasin Assessment, Total Maximum Daily Loads,* Revised: September 29,1999; pages 70-72; *http://www.deq.idaho.gov/media/451243-_water_data_reports_surface_water_tmdls_boise_river_lower_boise_river_lower_entire.pdf*

[96] See: *Implementation Plan for the Lower Boise TMDL,* December 2003, *http://www.deq.idaho.gov/media/451449-water_data_reports_surface_water_tmdls_boise_river_lower_boise_river_lower_plan_entire.pdf*

modelling or replicating programs currently conducted within the Boise/Garden City Phase I MS4 Permit Area by ACHD, City of Boise, City of Garden City, and the other Phase I MS4 co-permittees. Example activities envisioned by EPA to accomplish the LBR TMDL pollutant reduction goals are described below**:**

- Affected MS4 permittees could maintain an inventory and map of certain industrial and commercial activities, including all animal related facilities, within the Permit Area, in order to target and reduce the discharge of sediment and bacteria from industrial and commercial operations to the MS4. The purpose of the inventory would be to assist MS4 Permittees in identifying problem areas, with particular emphasis on sources likely to contribute sediment or bacteria to impaired receiving waters. To ensure the inventory and map are current and accurate, MS4 Permittees should update both inventory and map at least semi-annually using information obtained from field activities and intra-agency sources (such as business licenses, pretreatment permits, sanitary sewer hookups, etc.)

- For any facilities identified as needing separate NPDES permit coverage under the federal storm water requirements, the Affected MS4 Permittees may inform facilities of their obligation directly, and/or may notify EPA (by providing basic facility information) through EPA's compliance program for further action.

- Affected MS4 Permittees could collectively identify specific industrial/commercial activities not adequately addressed through existing programs within the watershed, and develop best management practices for each activity, then educate selected industrial/commercial audiences regarding performance expectations. Examples of such industrial or commercial practices a Permittee may choose to focus their efforts on could include: mobile power washing services; commercial car/truck washing operations; restaurant and/or fast food services; commercial animal services, such as kennels; wholesale or retail agricultural and construction supply businesses; urban agricultural activities; home gardening or agricultural supply establishments; landscaping businesses; and/or automobile repair shops.

- Affected MS4 Permittees could cooperatively prioritize and inspect these inventoried industrial and commercial facilities/activities that discharge to receiving waters and/or to the MS4s, to educate these private sector facility operators about the control of the pollutants of concern.

### *2. Discussion of the LBR Total Phosphorus WLAs*

Affected MS4 Permittees that discharge directly or indirectly to the main stem LBR from the portion of the watershed located within the MS4 Permit Area of Ada and Canyon Counties are the same as listed above: ACHD, Middleton; Caldwell; Nampa; Idaho Transportation District #3; Canyon Highway District #4; and Nampa Highway District #1.

The Lower Boise River, from Middleton to its confluence with the Snake River, does not meet the narrative criteria for excess nutrients in the Idaho WQS. The *Lower Boise River TMDL 2015 Total Phosphorus Addendum* (LBR Phosphorus TMDL), approved by EPA on December 22, 2015, quantifies TP pollutant sources, and identifies responsibility for load and waste load allocations needed to achieve the

WQS.[97] IDEQ's numeric target to describe nuisance aquatic growth within impaired AUs of the main stem lower Boise River is the mean monthly benthic (periphyton) chlorophyll a ≤ 150 mg/$m^2$, year round.[98]

IDEQ assigned two types of WLAs for total phosphorus to the NPDES-regulated small MS4s discharging to the LBR. One WLA for municipal storm water discharges occurring during wet weather, representing a target TP load reduction of 42% on average across all regulated small MS4 discharges. A second WLA for dry weather discharges from MS4s represents a target of 84% TP load reduction on average across all MS4s.

IDEQ acknowledges that it based these WLAs and load reduction targets on limited data and conservative assumptions. Because the "plumbing" of the MS4 systems with the LBR watershed is intricate and complex, and the quantity of the non-storm water inputs is unknown, IDEQ asked MS4 Permittees to provide initial estimates for the percentage of the non-storm water discharges through their MS4s that originates from nonpoint sources. IDEQ expects these estimates to be refined through monitoring and mapping in future permit cycles and as part of TMDL implementation. Further, IDEQ recommends that TMDL-related activities be determined on a watershed basis, such that all regulated small MS4 entities are conducting the same or similar types of actions. EPA agrees that it is necessary to verify all existing MS4 outfalls discharging during dry weather, and to characterize such flows by type and source. It is also necessary to confirm whether such ground water and/or irrigation water flows are indeed uncontaminated. If dry weather flows from the MS4 are determined to be uncontaminated, they may be "allowable non-storm water discharges," as conditionally provided by MS4GP Parts 2.5, 2.6 and 2.7.

IDEQ encourages discharge or pollutant trading (between with other sectors and sources) to facilitate cost effective load reductions. The LBR Phosphorus TMDL recognizes that retrofitting the existing infrastructure may require considerable time and resources; and recommends that runoff from new urban development be managed carefully, using appropriate BMPs consistent with the overall TP reduction goals.[99]

**Conclusion***:* To address the WLAs for wet weather MS4 discharges and dry weather MS4 discharges established by the LBR Phosphorus TMDL, MS4GP Appendix F.4 requires the Affected MS4 Permittees discharging to impaired segments of the Boise River and its tributaries to update or revise the storm water monitoring/assessment efforts begun under the prior MS4 permit term. In addition, Appendix F.4 requires Affected MS4 Permittees to submit descriptions of at least two (2) pollutant reduction activities to target and control discharges of total phosphorus. Such activities may augment existing control measures, or may target new actions, as deemed appropriate by the Permittee(s).

EPA determines that continued implementation of the comprehensive SWMP control measures by ACHD, City of Middleton; City of Caldwell; City of Nampa; Idaho Transportation District #3; Canyon

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[97] See: LBR Phosphorus TMDL at: *http://www.deq.idaho.gov/media/60177413/lower-boise-river-tmdl-total-phosphorus-addendum-0815.pdf*.

[98] LBR Phosphorus TMDL, page 64.
[99] LBR Phosphorus TMDL page 98

Highway District #4; and Nampa Highway District #1 (as directed in MS4GP Part 3) is sufficient to meet the numeric target for nuisance aquatic growth in the LBR, and that no additional SWMP control measures are necessary at this time. These measures include specifications for erosion and sediment control, as well as permanent storm water management controls, for site development disturbing 5,000 square feet or more. Enforceable requirements are required for sites disturbing 1 or more acres. In addition, proper operation and maintenance of the MS4 (including regular sweeping of roadway surfaces) will enhance the removal of sediment solids from the MS4s discharging into these impaired segments. EPA and IDEQ will evaluate the required Annual Reports submitted by each MS4 operator to assess each entity's implementation of the required SWMP measures.[100]

EPA encourages a watershed-based approach to monitoring/assessment efforts and encourages stakeholders to fulfill the necessary objectives of the LBR Phosphorus TMDL implementation efforts. EPA believes that continued monitoring/assessment data will substantiate future modelling efforts to estimate wet weather pollutant loading from MS4 outfalls. Monitoring is therefore appropriate and necessary for IDEQ and EPA to determine compliance with the load reduction targets/WLAs assigned to the affected MS4 discharges. As IDEQ acknowledges uncertainty in the assumed loading from wet weather/storm water MS4 discharges, and states that this uncertainty will be addressed during implementation planning through additional monitoring, and/or further characterization of storm water; such characterization activities may include additional modeling.[101]

MS4GP Appendix F.4 requires the Affected Permittee(s) to submit new or updated Monitoring/Assessment Plan(s) and pollutant reduction activity descriptions for review and specific incorporation into the MS4GP no later than 180 days from permit effective date. EPA will review and consider modifying relevant potions of MS4GP Appendix F.4 to incorporate the specific Permittee's pollutant monitoring/assessment and pollutant reduction activities.

To address the WLA for dry weather discharges established by the LBR Phosphorus TMDL, EPA recommends that all Affected MS4 Permittees consider conducting enhanced dry weather screening surveys to locate and document the occurrence of dry weather discharges from their MS4s, in addition to the mapping and discharge screening requirements for Illicit Discharge Management in MS4GP Part 3.5. The Affected Permittees should monitor identified dry weather flows, in order to distinguish between groundwater seepage and agricultural sources. Such diagnostic testing can be conducted using field test parameters and protocols recommended by EPA guidance.[102] These additional actions are appropriate and necessary in order to begin the multi-year (and possibly multi-permit term) effort to field-verify the location of all existing MS4 outfalls discharging to the LBR during dry weather. In addition, identified dry weather flows should be sufficiently characterized to confirm whether such flows originate from ground water and/or irrigation. Finally, identified dry weather flows should be eliminated as soon as possible so that any remaining discharges are indeed known to be uncontaminated (and therefore, qualify as "allowable") non-storm water discharges from the MS4.

[100] LBR Phosphorus TMDL pages 93-100
[101] See LBR Phosphorus TMDL pages 74 and 86.
[102] See: *Illicit Discharge Detection and Elimination: A Guidance Manual*, October 2004; Chapters 7, 11, and 12.

## E. Indian, Mason, Fifteenmile, Tenmile, Fivemile, and Willow Creeks

**Summary:** Continued monitoring/assessment of potential pollutant loading from MS4 discharges, combined with targeted pollutant reduction activities, is necessary and appropriate to reduce sediment and *E. coli* in MS4 discharges to these receiving water segments, consistent with the WLAs established in the EPA-approved TMDL.

| Urbanized Area/City | Receiving Water | Waterbody Assessment Unit | Impairment Pollutants | TMDL Status |
|---|---|---|---|---|
| Nampa | Indian Creek | ID17050114SW002_04<br>*Indian Creek - Sugar Ave. to Boise River*<br><br>ID17050114SW003b_03<br>*Indian Creek Reservoir to New York Canal*<br><br>ID17050114SW003d_02<br>*Indian Creek above Reservoir – 1st and 2nd order*<br><br>ID17050114SW003d_03<br>*Indian Creek above Reservoir – 3rd order* | Sediment, *E. coli* | *Lower Boise River TMDL 2015 Sediment and Bacteria Addendum.* June 2015. Approved September 2015. |
| Nampa | Mason Creek | ID17050114SW006_02<br>Mason Creek - entire watershed | Sediment, *E. coli* | |
| Nampa | Fifteenmile Creek | ID17050114SW007_04- *Fifteenmile Creek 4th order (Fivemile Creek to mouth*) | Sediment, *E. coli* | |
| Nampa | Fifteenmile Creek | ID17050114SW007_04- *Fifteenmile Creek 4th order (Fivemile Creek to mouth*) | Sediment, *E. coli* | |
| Nampa | Tenmile Creek | ID17050114SW008_03-<br>*Tenmile Creek - 3rd order below Blacks Creek Reservoir* | Sediment, *E. coli* | |
| Nampa | Fivemile Creek | ID17050114SW010_02-<br>*Fivemile Creek, Eightmile and Ninemile Creeks - 1st & 2nd order* | *E.coli* | |
| | | ID17050114SW010_03-<br>*Fivemile Creek - 3rd order tributaries* | Sediment, *E. coli* | |
| Nampa | Willow Creek | ID17050114SW015_03<br>*Willow Creek - 3rd order* | Sediment | |

**Discussion:** Affected MS4 Permittees that discharge directly or indirectly to these waters from the portion of the watershed located within the MS4 Permit Area of Ada and Canyon Counties include ACHD, Middleton; Caldwell; Nampa; Idaho Transportation District #3; Ada County; Canyon Highway District #4; and Nampa Highway District #1.

IDEQ established bacteria and sediment targets for the impaired segments of Indian, Mason, Fifteenmile, Tenmile, Fivemile, and Willow Creeks in the *Lower Boise River TMDL 2015 Sediment and Bacteria Addendum (LBR 2015 TMDL Addendum).*

The LBR 2015 TMDL Addendum establishes applicable storm water targets, of 20 mg/L, less 2.5 mg/L for natural background for sediment, and 126 cfu/100 mL for *E. coli*. These targets are not end-of pipe limits, but instead are averages (4-month average for sediment and 30 days average for *E. coli*) that only apply to MS4 outfalls discharging over the entire averaging period. Where such long-duration discharges from MS4 outfalls occur, the same target concentrations apply to every storm water outfall. However, because wet weather MS4 discharges typically last only a few hours or days, the TMDL considers such wet weather discharges to be short duration pollutant sources; DEQ provides the following narrative interpretation of the TMDL WLAs for short-term discharges of bacteria and sediment:

"*1. Storm water entities must continue management practices that reduce sediment and E. coli; [and]*
*2. Storm water entities must continue to identify and characterize inputs to their systems pollutant*."[103]

**Conclusion:** The requirements for the comprehensive SWMP as directed in MS4GP Part 3, and the additional illicit discharge management activities suggested above for compliance with the 1999 LBR TMDL and the LBR Phosphorus TMDL, are appropriate and necessary to ensure progress towards complying with the LBR 2015 TMDL Addendum. EPA and IDEQ will evaluate the required Annual Reports submitted by each MS4 operator to assess each entity's implementation of the required SWMP measures.

[103] See: *Lower Boise River TMDL: 2015 Sediment and Bacteria Addendum*, pages 51-55.

## F. Paradise Creek in Idaho

**Summary:** There are no WLAs established by the EPA-approved TMDL for the Idaho portion of Paradise Creek. Implementation of the comprehensive SWMP pursuant to MS4GP Part 3, by the New MS4 Permittees designated by EPA (i.e., City of Moscow and University of Idaho), is consistent with the EPA-approved TMDL for the Idaho portion of Paradise Creek.

| Urbanized Area/City | Receiving Water | Waterbody Assessment Unit | Impairment Pollutants | TMDL Status |
|---|---|---|---|---|
| Moscow | Paradise Creek | ID17060108CL005_02<br>*Paradise Creek - Urban boundary to Idaho/Washington border* | Ammonia (Un-ionized)<br>*E.* coli<br>Fecal Coliform<br>Nutrient/ Eutrophication Biological Indicators<br>Sedimentation/ Siltation<br>Temperature | *Paradise Creek TMDL Water Body Assessment and Total Maximum Daily Load, December 1997.* Approved February 1998.<br><br>*Paradise Creek Total Maximum Daily Load Implementation Plan* December 1999.<br><br>*Paradise Creek TMDL 2015 Bacteria Addendum,* October 2015. Submitted to EPA. |

**Discussion:** As previously discussed in this Fact Sheet, and in a separate designation decision document, EPA proposes to designate MS4 discharges to Paradise Creek located within the combined boundaries of the City of Moscow amd the Moscow, Idaho urban cluster as requiring NPDES permit coverage under the MS4GP. At a minimum, EPA determines to consider the MS4s operated by City of Moscow and University of Idaho to be "regulated small MS4s" upon the MS4GP effective date.

EPA approved IDEQ's *Paradise Creek Water Body Assessment and TMDL* (Paradise Creek TMDL) in 1998; the TMDL addresses ammonia, nutrients, sediment, bacteria, and temperature. The Paradise Creek TMDL identifies urban runoff, discharged from within the City of Moscow boundaries, as a contributing source of pollutants to Paradise Creek. Urban runoff is included as part of the non-point source load allocation for each parameter.

The Paradise Creek TMDL establishes load allocations in the form of in-stream targets for fecal coliform, TSS, and total phosphorus. IDEQ subsequently developed the *Paradise Creek TMDL 2015 Bacteria Addendum (Paradise Creek 2015 Addendum*), to update the bacteria indicator from fecal coliform to *E. coli* based on the current Idaho WQS criterion for secondary contact recreation. The combined instream targets are established for *E. coli* at 126 cfu/100 mL (collected as a 5-sample geometric mean over 30 days); total phosphorus, at 0.136 mg/l during the summer months; and TSS, at 50 mg/l over background for 10 consecutive days. The TMDL(s) identify land development, urban storm water systems, resident

and business activities, roadways, and parking lots as among the primary nonpoint sources of bacteria, TSS, and total phosphorus in the Paradise Creek watershed.[104]

The TMDL states that regulated small MS4 operators must "obtain an NPDES permit from EPA, implement a comprehensive municipal storm water management program, and use BMPs to control pollutants in storm water discharges to the maximum extent practicable."[105]

**Conclusion for MS4 Discharges in the Moscow, Idaho area**: EPA determines that full implementation of the comprehensive SWMP control measures, pursuant to MS4GP Part 3, by the regulated small MS4s designated by EPA (including, but not limited to, City of Moscow and University of Idaho) is consistent with the EPA approved TMDL for Paradise Creek. additional requirements are necessary to ensure compliance with the Paradise Creek TMDL's bacteria, TSS, and total phosphorus targets for the portion of Paradise Creek within Idaho.

[104] See *Paradise Creek TMDL*, pages 24 and 45; and *Paradise Creek 2015 Addendum,* page 13.

[105] See *Paradise Creek 2015 Addendum,* page 29.

## G. Paradise Creek, downstream of Idaho/Washington border

**Summary:** Consistent with the WLAs established in the EPA-approved TMDL by the Washington Department of Ecology (Ecology), monitoring/assessment of potential pollutant loading from MS4 discharges, combined with targeted pollutant reduction activities, is necessary and appropriate to reduce pollutants in regulated small MS4 discharges to Paradise Creek downstream of the Idaho/Washington border.

| Urbanized Area/City | Receiving Water | Waterbody Assessment Unit | Impairment Pollutants | TMDL Status |
|---|---|---|---|---|
| Moscow | Paradise Creek (WA portion) | Paradise Creek 10443 (WA-34-1025)<br>Paradise Creek 10439 (WA-34-1025)<br>Paradise Creek 10444 (WA-34-1025) | Fecal Coliform Bacteria | *South Fork Palouse River Fecal Coliform Bacteria Total Maximum Daily Load - Water Quality Improvement Report* WDOE Publication No. 09-10-060 October 2009. Approved 2009. |

**Discussion:** Downstream WQ impairments require that EPA include terms and conditions in the MS4GP to reflect appropriate WQBELs for impairment parameters. See 40 CFR §122.44 (d)(4) & (d)(5).

The Washington Department of Ecology's (Ecology) *2012 Water Quality Assessment Report* lists the South Fork of the Palouse River, downstream of the Idaho/Washington border, as not meeting the Washington water quality standards for fecal coliform. EPA approved Ecology's *South Fork Palouse River Fecal Coliform Bacteria Total Maximum Daily Load - Water Quality Improvement Report (SF Palouse River FC Bacteria TMDL),* in 2009. Ecology conducted wet and dry season sampling in Paradise Creek at the Washington-Idaho state line as part of their assessment study, and found a large average pollutant load at the state line-monitoring site during the dry season. Ecology requires that discharge meet the Washington fecal coliform standards in Paradise Creek at the state border so that sufficient capacity remains in the river for other Washington sources in the South Fork Palouse River watershed.

**Conclusion**: In MS4GP Appendix F.5, EPA requires the Affected MS4 Permittees discharging to Paradise Creek to define and conduct monitoring/assessment to characterize bacteria loading discharged through the MS4. In addition, MS4GP Appendix F.5 requires Affected MS4 Permittees to submit descriptions of at least two (2) pollutant reduction activities to target and control discharges reduce bacteria loading in order to meet the reduction targets for fecal coliform established by Ecology's SF Palouse River FC Bacteria TMDL. Such activities may augment existing control measures, or may target new actions, as deemed appropriate by the Permittee(s).

EPA determines that implementation of the comprehensive SWMP control measures by City of Moscow and University of Idaho (as directed in MS4GP Part 3) is fully consistent with Ecology's SF Palouse River FC Bacteria TMDL approved by EPA. These measures include specifications for erosion and sediment control, as well as permanent storm water management controls, for site development disturbing 5,000 square feet or more. Enforceable requirements are required for sites disturbing 1 or more acres. In addition, proper operation and maintenance of the MS4 (including regular sweeping of roadway

surfaces) will enhance the removal of sediment solids from the MS4s discharging into these impaired segments. EPA and IDEQ will evaluate the required Annual Reports submitted by each MS4 operator to assess each entity's implementation of the required SWMP measures.

MS4GP Appendix F.5 requires the Affected Permittee(s) to submit Monitoring/Assessment Plan(s) and pollutant reduction activity descriptions for review and specific incorporation into the MS4GP no later than 180 days from permit effective date. EPA will review and consider modifying relevant potions of MS4GP Appendix F.5 to incorporate the specific Permittee's pollutant monitoring/assessment and pollutant reduction activities.

## H. South Fork Palouse River in Idaho

**Summary:** There are no WLAs established by the EPA-approved TMDL for the portion of the South Fork Palouse River within Idaho. For regulated small MS4s discharging to the South Fork Palouse River in Idaho (i.e., City of Moscow, as EPA has proposed to designate City of Moscow as a regulated small MS4), implementation of the comprehensive SWMP (as directed in MS4GP Part 3) is consistent with the EPA-approved TMDL.

| Urbanized Area/City | Receiving Water | Waterbody Assessment Unit | Impairment Pollutants | TMDL Status |
|---|---|---|---|---|
| Moscow | South Fork Palouse River | ID17060108CL002_03 *South Fork Palouse River-Gnat Cr. to Idaho/Washington border* | *E. coli* Nutrient/ Eutrophication Biological Indicators Sedimentation/ Siltation Temperature, water | *South Fork Palouse River Watershed Assessment and TMDLs*, February 2007. Approved October 2007. |

**Discussion:** EPA is using its authority to designate the City of Moscow as a regulated small MS4; a portion of the Moscow MS4 discharges to the South Fork Palouse River.

In 2007, IDEQ established instream targets for *E. coli*, nutrients, temperature, and sediment for the impaired segment of the South Fork Palouse River within Idaho as part of its *South Fork Palouse River Watershed Assessment and TMDLs* (SF Palouse TMDL).

The SF Palouse TMDL does not establish WLAs for urban storm water sources; IDEQ established a year round percent reduction target for *E.coli* of 41%.

**Conclusion**: Implementation of the comprehensive SWMP pursuant to MS4GP Part 3, by City of Moscow, is fully consistent with the EPA approved SF Palouse TMDL within Idaho; no additional requirements are needed to ensure compliance with the Idaho TMDL's targets for *E. coli*, nutrient, temperature and sediment.

## I. South Fork of the Palouse River, downstream of ID/WA border

**Summary:** EPA requires additional SWMP requirements in MS4GP Appendix F.5 for affected MS4 permittees discharging to the South Fork Palouse River, to comply with the WLAs established in the EPA-approved TMDLs established by Washington Department of Ecology.

| Urbanized Area/City | Receiving Water | Waterbody Assessment Unit | Impairment Pollutants | TMDL Status |
|---|---|---|---|---|
| Moscow | South Fork Palouse River (WA portion) | South Fork (SF) Palouse River 6712 (WA-34-1020)<br>SF Palouse River 6711 (WA-34-1020)<br>SF Palouse River 6710 (WA-34-1020)<br>SF Palouse River 6707 (WA-34-1020) | Fecal coliform bacteria<br><br>Chlorinated Pesticides<br><br>Polychlorinated Biphenyls (PCBs) | *South Fork Palouse River Fecal Coliform Bacteria Total Maximum Daily Load - Water Quality Improvement Report* WDOE Publication No. 09-10-060 October 2009. Approved<br><br>*Palouse River Chlorinated Pesticide and PCB Total Maximum Daily Load, Water Quality Improvement Report and Implementation Plan;* Publication No. 07-03-018 *July 2007.* Approved November 2007. |

**Discussion regarding Bacteria:** The Affected MS4 Permittee discharging to this waterbody is the City of Moscow.

The South Fork of the Palouse River, downstream of the Idaho/Washington border, is impaired for fecal coliform. EPA approved Ecology's *South Fork Palouse River Fecal Coliform Bacteria Total Maximum Daily Load - Water Quality Improvement Report (SF Palouse River FC Bacteria TMDL),* in 2009. Sampling conducted by Ecology in the Washington portion of the upper SF Palouse River (between the Idaho-Washington state line to the boundary limits of the City of Pullman, above Paradise Creek) demonstrates that the majority of bacteria loading to the upper SF Palouse River during both the wet season (56%) and dry season (67%) was from upstream sources in Idaho. Ecology states there is a "*linear relationship between TSS concentrations and FC bacteria concentrations in the upper SF Palouse River, indicating that the control of runoff processes (soil-erosion control) could result in lower FC concentrations*." Ecology then concludes that, "*While the bacteria counts at the Idaho border were within standards, the average wet-season FC bacteria load appears to use up most of the downstream load capacity in the upper SF Palouse*." [106] Because EPA intends to designate Moscow and other MS4s upstream of the state line as needing coverage under a MS4 permit, Ecology recommends the permit include specific actions to reduce wet and dry season bacteria loads.[107]

[106] SF Palouse River FC Bacteria TMDL, page 36-39, and page 83
[107] SF Palouse River FC Bacteria TMDL, page 100

**Conclusion regarding Bacteria**: See also discussion in Appendix 7.G above. In MS4GP Appendix F.5, EPA requires the Affected MS4 Permittee discharging to SF Palouse River to define and conduct monitoring/assessment of bacteria loading discharged. In addition, MS4GP Appendix F.5 requires Affected MS4 Permittee to submit descriptions of at least two (2) pollutant reduction activities to target and control discharges reduce bacteria loading in order to meet the reduction targets for fecal coliform in the SF Palouse River FC Bacteria TMDL. Such activities may augment existing control measures, or may target new actions, as deemed appropriate by the Permittee(s).

MS4GP Appendix F.5 requires the Affected Permittee(s) to submit Monitoring/Assessment Plan(s) and pollutant reduction activity descriptions for review and specific incorporation into the MS4GP no later than 180 days from permit effective date. EPA will review and consider modifying relevant potions of MS4GP Appendix F.5 to incorporate the specific Permittee's pollutant monitoring/assessment and pollutant reduction activities.

**Discussion regarding PCBs:** The Affected MS4 Permittee discharging to this waterbody is the City of Moscow.

The South Fork of the Palouse River, downstream of the Idaho/Washington border, does not meet the Washington WQS for polychlorinated biphenyls (PCBs). Ecology's current water quality criterion for total PCBs is 170 picograms per liter (pg/L). The *Palouse River Chlorinated Pesticide and PCB Total Maximum Daily Load, Water Quality Improvement Report and Implementation Plan* (Palouse River PCB TMDL), completed in 2007 and subsequently approved by EPA later that year, establishes the instream target and describes how controls will be implemented within the Palouse River will achieve WQS for PCBs and dieldrin. The TMDL identifies municipal SWMP activities in the urban boundary of the City of Pullman (conducted by the City and by Washington State University) as necessary to reduce PCB loading to the Palouse River.

Downstream WQ impairments require that EPA include terms and conditions in the MS4GP to reflect appropriate WQBELs for impairment parameters. See 40 CFR §122.44 (d)(4) & (d)(5). Consistent with the Palouse River PCB TMDL, EPA includes provisions for regulated MS4 discharges in Idaho.

**Conclusion regarding PCBs:**
EPA has determined it appropriate to include requirements in MS4GP Appendix F.5 for the Affected Permittee to submit descriptions of at least two (2) pollutant reduction activities by which the Permittee will address whether legacy PCBs are discharged through their MS4 into the South Fork of the Palouse River. Such BMP activities may augment existing SWMP control measures, or may focus on completely new actions, as may be deemed appropriate by the Permittee(s). Examples of BMPs used by other regulated MS4 operators to address PCB loading are available in the Administrative Record for the MS4GP.

MS4GP Appendix F.5 also requires monitoring/assessment of PCBs from regulated MS4 discharges into the South Fork of the Palouse River. As discussed in Appendix 6.B of this Fact Sheet, EPA has acknowledged the limitations of the EPA-approved analytical methods for PCBs, specifically noting that current EPA approved methods are not sufficiently sensitive to assess PCBs in water at the levels needed to compare with the downstream WQS in Washington. EPA is therefore using its authority to specify in the MS4GP that, if the Affected Permittee elects to continue monitoring/assessment of MS4 discharges,

they must use EPA Method 1668C for monitoring of PCBs in water. [108] Alternatively, in order to assess regulated MS4 discharges as possible source(s) of PCBs into the South Fork of the Palouse River, and to quantify any estimated pollutant removed or prevented from discharging through the MS4, the Affected Permittee may instead select to monitor/assess PCBs in accumulated sediment removed from the MS4's catch basins. In such situations, EPA Method 8082 continues to be an appropriate method for sampling PCBs in catch basin solids.

MS4GP Appendix F.5 and Part 6.2.6.1 provide the Affected Permittees with options for monitoring/assessing for PCBs, offering maximum implementation flexibility to address potential PCB loading from their MS4 discharges.

MS4GP Appendix F.5requires Affected Permittee(s) to submit new or updated Monitoring/Assessment Plan(s) and pollutant reduction activity descriptions for review and specific incorporation into the MS4GP no later than 180 days from permit effective date. EPA will review and consider modifying relevant potions of MS4GP Appendix F.5 to incorporate the specific Permittee's pollutant monitoring/assessment and pollutant reduction activities.

[108] See *EPA's Plan for Addressing PCBs in the Spokane River, Defendants' Response to the Remand by the Court, Sierra Club, et al. v. McLerran, No. C11-1759-BJR (July 14, 2015)* Appendix B pages. 2-8.

## J. Tammany Creek

**Summary:** Targeted pollutant reduction activities is necessary and appropriate to reduce sediment, nutrients, and *E. coli* in MS4 discharges to these receiving water segments, consistent with the WLAs established in the EPA-approved TMDL.

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| Urbanized Area/City | Receiving Water | Waterbody Assessment Unit | Impairment Pollutants | TMDL Status |
|---|---|---|---|---|
| Lewiston | Tammany Creek | ID17060103SL014_02<br>*Tammany Creek - WBID 015 to unnamed tributary*<br>ID17060103SL014_03<br>*Tammany Creek - Unnamed Tributary to mouth*<br>ID17060103SL016_02<br>*Tammany Creek-source to Unnamed Tributary(T34N, R04W, Sec19)* | *E. coli*<br>Nitrogen, Nitrate<br>Total Phosphorus<br>Sedimentation<br>Siltation | *Tammany Creek Sediment TMDL,* September 2001.Approved February 2002.<br><br>*Tammany Creek Watershed (HUC 17060103) TMDL Addendum,* September 2010. Approved December 2010. |

**Discussion**: Regulated small MS4s discharging to Tammany Creek includes, but is not limited to, the City of Lewiston.

EPA has not issued a NPDES permit to the City of Lewiston, thus, the City of Lewiston is a New Permittee and has not yet fully implemented a comprehensive Storm Water Management Program in compliance with an applicable NPDES permit for MS4 discharges. If other regulated small MS4s discharge to Tammany Creek, implementation of the SWMP control measures would be required upon that entity's authorization under the MS4GP.

In 2010, IDEQ updated established waste load allocations for storm water point sources discharging nutrients (total phosphorus and nitrite plus nitrate as nitrogen), bacteria, and sediment to the impaired segments of Tammany Creek in its *Tammany Creek Watershed TMDL Addendum* (Tammany Creek TMDL).

The Tammany Creek TMDL allocates 6% of the total load allocations for each pollutant to the City of Lewiston and other regulated small MS4s within the watershed. Another 1.5 % of the available loading allows for future development growth in the watershed. The TMDL sets monthly sediment targets, and IDEQ estimates that sediment reductions of up to 83% are necessary to attain the sediment target(s). IDEQ also sets an instream target for *E. coli* equal to the Idaho WQS for secondary contact recreation (i.e., 30-day geometric mean concentration of 126 cfu/100ml), estimating that a 72% reduction is need from all contributing bacteria sources in order to meet the instream target. IDEQ provides a numeric interpretation of the Idaho WQS to represent nutrients, (i.e., 0.072 mg/l and 0.03 mg/L for nitrite plus nitrate as nitrogen and total phosphorus, respectively) representing a needed reduction in nitrates of approximately 98%, and reduction in total phosphorus loads up to 89%.

**Conclusion:** EPA has determined that no additional requirements are necessary to ensure compliance with the load reduction target/WLA assigned to the MS4s operated by the City of Lewiston. SWMP control measures in MS4GP Part 3 will sufficiently reduce sediment, bacteria, and total phosphorus loading in discharges from their MS4 discharges. These measures include specifications for erosion and

sediment control, as well as permanent storm water management controls, for site development disturbing 5,000 square feet or more. Enforceable requirements are required for sites disturbing 1 or more acres. In addition, proper operation and maintenance of the MS4 (including regular sweeping of roadway surfaces) will enhance the removal of sediment solids from the MS4s discharging into these impaired segments. EPA and IDEQ will evaluate the required Annual Reports submitted by each MS4 operator to assess each entity's implementation of the required SWMP measures. Implementation of the comprehensive SWMP control measures by City of Lewiston in areas where the MS4(s) discharge to Tammany Creek will be fully consistent with the Tammany Creek TMDL.

## K. Lindsay Creek

**Summary:** EPA requires additional SWMP requirements and monitoring in MS4GP Appendix F.6 for affected MS4 permittees discharging to Lindsay Creek in order to comply with the WLAs established in the EPA-approved TMDLs.

| Urbanized Area/City | Receiving Water | Waterbody Assessment Unit | Impairment Pollutants | TMDL Status |
|---|---|---|---|---|
| Lewiston | Lindsay Creek | ID17060306CL003_02 *Source to mouth*<br>ID17060306CL003_03 *Source to mouth* | *E.* coli<br>Nutrient/ Eutrophication Biological Indicators<br>Sedimentation/ Siltation | *Lindsay Creek Watershed Assessment and Total Maximum Daily Loads*, December 2006, Amended March 2007. Approved, June 2007. |

**Discussion:** Affected MS4 Permittees that discharge to Lindsay Creek include, but may not be limited to, the City of Lewiston.

EPA has not issued a NPDES permit to the City of Lewiston, or other potential regulated small MS4s discharging to Lindsay Creek, thus, the City of Lewiston is a New Permittee and has not yet fully implemented a comprehensive Storm Water Management Program in compliance with an applicable NPDES permit for MS4 discharges. If other regulated small MS4s discharge to Lindsay Creek, implementation of the SWMP control measures would be required upon that entity's authorization under the MS4GP.

EPA approved the *Lindsay Creek Watershed Assessment and Total Maximum Daily Loads (*Lindsay Creek TMDL) in 2007, wherein IDEQ allocated a portion of the pollutant loads as a waste load allocation for urban storm water in order to control bacteria and sediment in Lindsay Creek. The TMDL assigns no WLA to urban runoff for nutrients. The TMDL sets the instream target for *E. coli* equal to the Idaho WQS (30-day geometric mean concentration of 126 cfu/100ml), and estimates that a 66% reduction is needed from all contributing bacteria sources in order to meet the instream target. The TMDL sets an average monthly target of 50 mg/L TSS, not to exceed a maximum daily average of 80 mg/L. Sediment reductions of up to 81% necessary are likely necessary during certain months in order to attain the sediment target.

The TMDL allocates 3% of the total load allocations for bacteria and sediment to the City of Lewiston and other regulated small MS4s within the watershed, and allows another 8% of the available loading, per pollutant, to allow for future development growth within the Lewiston Orchards area of the watershed. IDEQ states that thee WLA and reserve allocation for growth are temporary, and subject to future revision, until more current and applicable data becomes available.[109]

**Conclusion:** MS4GP Appendix F.6 requires the Affected MS4 Permittee(s) to submit descriptions of two (2) pollutant reduction activities to target and control bacteria loading in order to meet the reduction targets for fecal coliform in the Lindsay Creek TMDL. Such activities may augment existing control measures, or may target new actions, as deemed appropriate by the Permittee(s).

[109] See "Lindsay Creek Watershed Assessment and TMDLs," page 56.

MS4GP Appendix F.6 requires the Affected Permittee(s) to submit pollutant reduction activity descriptions for review and specific incorporation into the MS4GP no later than 180 days from permit effective date. EPA will review and consider modifying relevant potions of MS4GP Appendix F.6 to incorporate the specific Permittee's pollutant reduction activities.

# Appendix 8: Anti-backsliding

The MS4GP requires Permittees to control pollutants discharged through their MS4 to the MEP, to protect water quality, and to satisfy the appropriate water quality requirements of the Clean Water Act. The MS4GP requires permittees to implement a comprehensive SWMP as the primary mechanism to achieve the necessary pollutant reductions in their MS4 discharges.[110]

As previously described in Part III.C of this document, the SWMP requirements in the MS4GP (when compared to EPA's previously issued Phase II MS4 permits in Idaho) reflects EPA's iterative decision-making process to identify the "*controls necessary to reduce the discharge of pollutants from the MS4 to the MEP*" between NPDES permit terms. Accordingly, the MS4GP contains clear, specific, and measureable provisions to prescribe the continued implementation of specific tasks, BMPs, BMP design requirements, performance requirements, adaptive management requirements, schedules for implementation, and maintenance, and frequency of actions as minimum control measures. Although such provisions are expressed differently than the comparable provisions in EPA's previously issued Phase II small MS4 permits in Idaho, EPA has determined that the provisions in the MS4GP are, in all cases, at least as stringent as those established in the previous MS4 permits.

[110] See 40 CFR § 122.44(k).